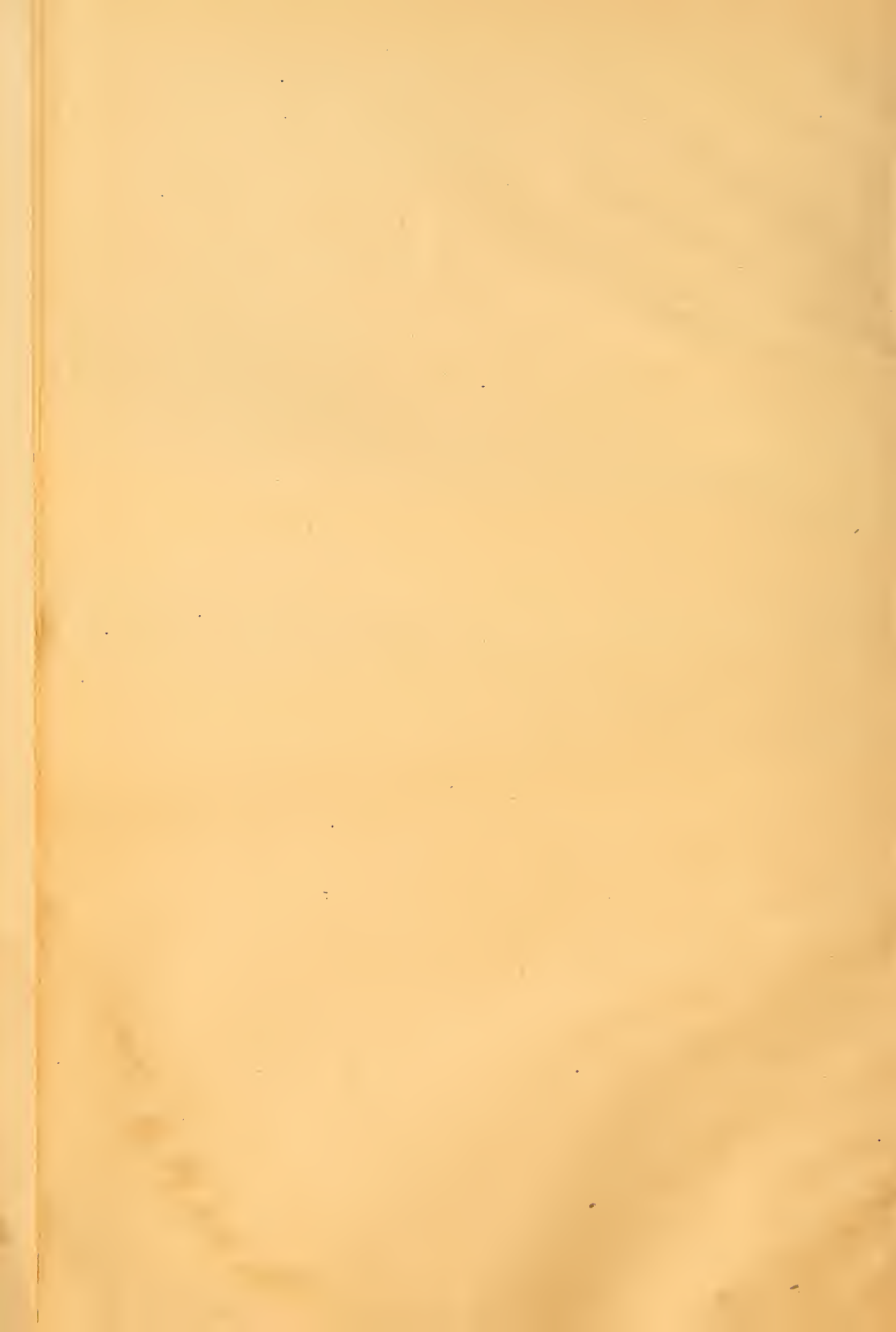


Digitized by the Internet Archive
in 2012 with funding from
Boston Library Consortium Member Libraries



CITY DOCUMENTS

OF THE

CITY OF LOWELL

MASSACHUSETTS

FOR THE

YEAR 1920-1921



LOWELL, MASS.

SULLIVAN BROS., PRINTERS  238 CENTRAL STREET

EXTRACT FROM THE ORDINANCES OF LOWELL

CHAPTER VIII—CITY DOCUMENTS

Section 5. All City Documents (except the Rules and Regulations for the Government of the Police and Fire Departments) shall be printed in pamphlet form of the size of the Annual Report of the School Committee.

Section 6. All City Documents shall be bound together in one volume, under the direction of the City Clerk, and three or more copies shall be placed in the City Library, and one copy in the library of the Middlesex Mechanics' Association, one copy shall be sent to each City of the Commonwealth, to the library of the Harvard College, the Public Library of Boston, the State Library, the Smithsonian Institute at Washington, and the Old Residents' Historical Association of Lowell.

CONTENTS

1. Ninety-fifth Annual Report of the School Committee of Lowell, together with Fifty-seventh Annual Report of Superintendent of Schools, 1920.
2. Auditor's Eighty-fifth Annual Report of the Receipts and Expenditures of the City of Lowell, also General Information for the financial year ending December 31, 1920.
3. Ninth Annual Report of the Commissioner of Water Works, and the Reports of the Superintendent of Water Works and the City Engineer, for the year ending December 31, 1920.
4. Reports of the Births, Marriages and Deaths, 1920.
5. Report of the Board of Health, 1920.

6. Ninth Annual Report of Fire Commissioner, 1920.
7. Park Commissioner Seventeenth Annual Report, ending December 31, 1920.
8. Reports of the Trustees of the City Library for 1920.
9. Report of the City Solicitor for the year ending December 1920.
10. List of Jurors for the year 1921.
11. Annual Report of the Police Department, December 31, 1920.

Ninety-Fifth Annual Report
OF THE
SCHOOL COMMITTEE
OF THE
CITY OF LOWELL
AND THE
Fifty-Seventh Annual Report
OF THE
Superintendent of Public Schools
1920



CITY OF LOWELL

Office of the School Committee.

Lowell, Mass., Aug. 30, 1921.

At a meeting of the School Committee, held on this date, it was voted to adopt the report of the Superintendent of Schools for 1920 as the report of the School Committee for that year and to authorize the printing of the report.

In accordance with this vote the report is herewith submitted.

HUGH I. MOLLOY,

Secretary.

ORGANIZATION

OF THE

School Committee

1920

THOMAS B. DELANEY, Chairman

HUGH J. MOLLOY, Secretary

MEMBERS

	Term Expires
*WILLIAM L. CROWLEY.....	1920
Res. 25 Sarah Ave.	Tel. 3125-W
Bus. 321 Hildreth Bldg.	
THOMAS B. DELANEY.....	1921
Res. 92 West St.	Tel. 4942
JULIAN B. KEYES.....	1920
Res. 65 Fairmount St.	Tel. 3578
Bus. 204 Merrimack St.	
JAMES E. MARKHAM.....	1921
Res. 12 Burns St.	Tel. 5352-M
Bus. 53 Central St.	
GEN. GARDNER W. PEARSON.....	1920
Res. 59 Clitheroe St.	Tel. 2479
Bus. 416 Hildreth Bldg.	
**JAMES H. ROONEY, D. M. D.	1920
Res. 238 Pine St.	Tel. 4033-M
Bus. 6 Strand Bldg.	

..Died January 29, 1920.

**Elected to fill unexpired term of Wm. L. Crowley.

REGULAR MEETINGS OF THE SCHOOL COMMITTEE

January 27	May 25	September 28
February 24	June 29	October 26
March 30	July 27	November 30
April 27	August 31	December 28

ADMINISTRATION

Superintendent of Public Schools

HUGH J. MOLLOY

Office in City Hall

Office Tel. 2728

Home Tel. 3121

Office Hours—One hour after the forenoon session of the schools; at other times, including Saturdays, by appointment

Clerks

FANNIE A. THOMPSON

Home Tel. 1066

KATHARINE L. CARMICHAEL

Business Agent

HENRY L. WILLIAMS

Office Tel. 2727

Home Tel. 2714

Clerk in Business Agent's Office

LEDA C. LAMONTAGNE

Office in School Supply Room, City Hall

Stock-keeper

FREDERICK JOHNSTON

Office hours for Supply Room

8 a. m. to 5 p. m.

Supervisor of Janitors

WILLIAM F. THORNTON

Oce Tel. 3960

Home Tel. 3423

Attendance Officers

William F. Thornton, Camille Roussin, John J. Walker, Mary H. Downey

Clerk in Attendance Office

STELLA G. MOLONEY

Office—Third Floor of City Hall

Office Hours—9 to 4 o'clock daily, except Saturday; Saturday 9 to 12.30 o'clock.

ORGANIZATION

OF THE

School Committee

1921

THOMAS B. DELANEY, Chairman

HUGH J. MOLLOY, Secretary

MEMBERS

	Term Expires
ALBERT BERGERON	1922
Res. 35 Mt. Vernon St.	Tel. 3511-R
Bus. 229 Hildreth Bldg.	
THOMAS B. DELANEY	1921
Res. 92 West St.	Tel. 4942
EDWARD J. DONNELLY	1922
Res. 14 Ames St.	Tel. 2359-W
JAMES E. MARKHAM	1921
Res. 12 Burns St.	Tel. 5352-M
Bus. 53 Central St.	
JAMES C. WARNER	1922
Res. 71 Pine St.	Tel. 2747-J

REGULAR MEETINGS OF THE SCHOOL COMMITTEE

January 25	May 31	September 27
February 22	June 28	October 25
March 29	July 26	November 29
April 26	August 30	December 27

ADMINISTRATION

Superintendent of Public Schools

HUGH J. MOLLOY

Office in City Hall

Office Tel. 2728

Home Tel. 3121

Office Hours—One hour after the forenoon sessions of the schools; at other times, including Saturdays, by appointment.

Clerks

FANNIE A. THOMPSON

Home Tel. 1066

KATHARINE L. CARMICHAEL

Business Agent

HENRY L. WILLIAMS

Office Tel. 2727

Home Tel. 2714

Clerk in Business Agent's Office

LEDA C. LAMONTAGNE

Office in School Supply Room, City Hall

Stock-keeper

FREDERICK JOHNSTON

Office hours for Supply Room

8 a. m. to 5 p. m.

Supervisor of Janitors

WILLIAM F. THORNTON

Office Tel. 3960.

Home Tel. 3423

Attendance Office

William F. Thornton, Camille Roussin, John J. Walker, Mary H. Downey.

Clerk in Attendance Office

STELLA G. MOLONEY

Office—Third Floor of City Hall

Office Hours—9 to 4 o'clock daily, except Saturday; Saturday 9 to 12.30 o'clock.

REPORT OF THE SUPERINTENDENT OF SCHOOLS

Office of the Superintendent of Schools,
Lowell, Mass., August 30, 1921

To the School Committee of Lowell:

The following report, for the year 1920, is respectfully submitted.

SUMMARY OF STATISTICS

Valuation of City.....	\$123,803,827.00
Valuation of school property.....	2,656,390.00
Rate of Taxation, \$27.20 per \$1,000	
Expenditures for Day Schools.....	907,170.58
Expenditures for Evening Schools and Americanization.....	38,516.59
Day school expenditures to total valuation.....	.716 per cent.
Day and Evening School expenditures to total valuation.....	.747 per cent.
Population by census of 1915.....	107,978
Number of polls.....	30,563
Number of Public Day Schools.....	61
One high, thirteen grammar, thirty primary, two mixed, fourteen kindergartens, one continuation.	
Number of school buildings.....	49
(Not including seven one-room portable buildings)	
Occupied by public schools, 47; occupied by vocational schools, 2	
Elected teachers, Dec. 31; on leave, 3; in service, 363, total, 366	
Permanent substitutes	24
Subdivisions of Elected Teachers in service:	
High, 18 men, 40 women; Grammar, 9 men, 151 women;	
Primary, 91 women; Mixed, 5 women; Kindergarten, 21	
women; Continuation, 8 men, 6 women; Drawing, 2	
women; Music, 1 man, 2 women; Sewing, 4 women; Man-	
ual Training, 2 men; Supervisor of Primary Grades, 1	
woman; Physical Director in Elementary Schools, 1 man;	
Assistant Physical Director in Elementary Schools, 1	
woman.	
Teachers in Evening Schools, counting principals, term of 1919-1920	61
Pupils enrolled in Evening Schools, term of 1919-1920.....	2,173
High, 1,460; Elementary, 713.	
Whole number of pupils enrolled in Day Schools, 1919-1920.....	13,358
High, 1,643; Grammar, 6,354; Primary, 4,543; Mixed, 198;	
Kindergarten, 620.	
Average number belonging to Day Schools, 1919-1920.....	11,703
High, 1,488; Grammar, 5,721; Primary, 3,949; Mixed, 166;	
Kindergarten, 379.	
Average attendance, 1919-20.....	10,728
High, 1,424; Grammar, 5,319; Primary, 3,543; Mixed, 145;	
Kindergarten, 297.	
Average per cent. of attendance, 1919-20:	
High, 95.6; Grammar, 92.9; Primary, 89.7; Mixed, 87.3	
Kindergarten, 81.2.	
Average membership for year ending December, 1920.....	11,776
High, 1,548; Grammar, 5,753; Primary, 3,900; Mixed, 163;	
Kindergarten, 412.	
Number of school rooms in actual use in June, 1920.....	326
High, 50; Grammar, 153; Primary, 104; Mixed, 5; Kinder-	
garten, 14.	
Number of school rooms in actual use in December, 1920.....	327
High, 50; Grammar, 154; Primary, 104; Mixed, 5; Kinder-	
garten 14.	
Average number to each room for year ending June, 1920:	
High, 30; Grammar, 37; Primary, 38; Mixed, 33; Kinder-	
garten, 27.	

Average number to each room for year ending December, 1920:
High, 31; Grammar, 37; Primary, 37; Mixed, 33; Kindergarten, 29.

Average cost of each pupil for tuition only, based on average number belonging:
High, \$74.72; Grammar, \$46.35; Primary and Mixed \$39.47; Kindergarten, \$58.06.

Average cost per pupil, based on the average number belonging, and on the total expenditures for tuition, janitor service, medical inspection, supervision, supplies, fuel and all incidentals 71.49

VOCATIONAL SCHOOLS

Boys: Buildings, 1; rooms, 13; teachers, 12; pupils enrolled, 195; average number belonging, 165; average number attending, 151; per cent. of attendance, 91.

Girls: Buildings, 1; rooms, 6; teachers, 7; pupils enrolled, 126; average number belonging, 110; average number attending, 95; per cent. of attendance, 87.

RECEIPTS AND EXPENDITURES

Expenditures

Appropriated and Assessed in 1920.....	\$945,687.17
Amount Disbursed	945,687.17
Returned to general treasury.....	

Teachers of Day Schools:

High School	\$115,674.19
-------------------	--------------

Grammar Schools—Bartlett	\$24,396.09	
Butler	24,325.45	
Colburn	12,758.40	
Edson	16,152.85	
Green	17,978.95	
Greenhalge	17,030.48	
Lincoln	18,304.05	
Moody	15,349.95	
Morey	27,898.95	
Pawtucket	16,033.58	
Riverside	6,549.16	
Varnum	22,934.63	
Washington	16,966.93	
		\$236,679.47

Primary and Mixed Schools.....	143,382.97
Kindergartens	23,923.83
Special Teachers.....	22,998.23
Substitutes	24,427.25

Total paid for instruction in Day Schools..... \$567,085.94

Summer Schools	\$ 300.00
School Physicians, Dentist and School Nurses.....	7,800.00

Janitors:

Janitors of Day Schools.....	97,053.18
Pensions	844.68
Repairer of Furniture.....	1,500.00

Evening Schools:

Teachers, High and Elementary Schools.....	19,576.50
Janitors	3,650.50

\$130,724.86

Continuation School.....		12,297.12
Americanization:		
Teachers	\$ 9,119.00	
Janitors	1,044.00	
		\$ 10,163.00
Cost of Supervision:		
Superintendent of Schools.....	\$ 4,562.52	
Office Assistants.....	1,600.24	
Business Agent.....	2,668.73	
Stock-keeper	1,500.00	
Clerk in Supply Room.....	1,022.84	
Attendance Officers (four).....	7,582.92	
Clerk in Attendance Office.....	1,000.00	
		\$ 19,937.25
Vocational School Teachers and Janitors.....	\$ 51,915.82	
Total Salaries, Vocational Schools omitted.....	740,208.17	
Total Salaries, Vocational Schools included.....	792,123.99	
Expended for bills for the year 1920:		
Coal (Evening Schools, \$1,500.00).....	45,590.72	
Wood	865.50	
Water (Evening Schools, \$100.00).....	3,330.37	
Board of Truants.....	1,686.79	
Electricity (Evening Schools, \$1,200.00).....	2,177.99	
Gas	4,080.22	
General Repairs	2,054.66	
Electrical Repairs	861.17	
Furniture	3,132.15	
Books	19,157.43	
Paper and Supplies (Evening Schools, \$450.00).....	15,489.50	
Printing (Evening Schools, \$175.00).....	3,225.25	
Manual Training (Evening Schools, \$200.00).....	2,498.54	
Janitor Supplies	6,231.08	
Apparatus	340.49	
Dental Supplies	1,017.36	
Medical Supplies	901.13	
Cooking, Etc.	5,240.16	
Material for Sewing.....	574.89	
Autos	6,169.56	
Graduation (Evening Schools, \$75.00).....	954.05	
Regiment	1,033.85	
Telephones	1,041.94	
Transportation	1,058.07	
Miscellaneous	283.55	
Appropriation Transfers	2,942.64	
Continuation	1,598.62	
Physical Training	1,791.45	
Sight Saving	231.22	
Expense of School Committee.....	1,625.64	
Typewriters	2,295.68	
Rents	800.40	
Americanization	13.72	
Total		\$140,295.79

Bills, Vocational School.....	13,267.39
Total of Bills, Vocational School included.....	153,562.18
Salaries and Bills, Vocational School omitted.....	880,503.96
Salaries and Bills, Vocational School included.....	945,687.17
Analysis of Vocational School Expense	
Salaries of Day Teachers.....	\$ 31,691.09
Janitors of Day Schools.....	3,100.00
Salaries of Evening School Teachers.....	11,708.23
Janitors of Evening Schools.....	2,120.50
Smith-Hughes Fund	3,296.00
Total of Salaries.....	\$ 51,915.82
Equipment and Supplies.....	13,267.39
Total Expenditures for Vocational School.....	\$ 65,183.21
<i>Receipts</i>	
The receipts by the general treasury on account of the school department during the year were as follows:	
Vocational School:	
Smith-Hughes Fund	\$ 3,364.00
Reimbursement	14,633.63
Tuition	3,046.27
Earnings	803.07
General:	
Tuition	6,718.61
Massachusetts School Fund.....	66,000.00
Americanization	4,726.00
Total	\$ 99,291.58
Expenditures by Public Property Department.....	\$ 51,665.38

RECEIPTS AND EXPENDITURES

(Discussion)

The total amount expended by the School Committee for the year 1920 was \$945,687.17; the amount for the year 1919 was \$694,984.02. The increase for 1920 was \$250,703.15.

Beginning with November, 1919, practically all salaries in the department were increased \$400. The salaries which had been paid in the Lowell school department were much lower than those paid in cities of Lowell's class and standing, and, even with the increase of November, 1919, they were not high when compared with salaries in many cities.

The large items of increase in the year 1920 were as follows: Supervision, including clerks and attendance officers, \$4,332; high school salaries, \$26,848; grammar school salaries, \$47,858; primary and mixed school salaries, \$27,271; kindergarten salaries, \$7,070; special teachers, \$7,919; substitutes, \$13,023; continuation school (opened in September, 1920), \$12,297; evening schools, \$7,269; physicians, nurses and dentist, \$3,214; vocational school, \$22,027; day school janitors, \$26,419; bills, \$46,339.

The receipts by the general treasury of the city, on account of the school department, made up of tuition of non-resident pupils in the public and vocational schools, reimbursement by the state on account of the vocational and continuation schools, money from the Smith-Hughes fund, reimbursement by the state on account of Americanization work, and reimbursement by the state on account of salaries in the public schools, made a total of \$99,291.58; therefore the net expenditure by the School Committee for the year 1920 was \$846,395.59.

The item of reimbursement from the Massachusetts school fund is made up from an allowance of \$200 for every teacher's salary which is not less than \$850.

SCHOOL CENSUS

The following data were obtained from the census of 1920:

	Males	Females	Total
(a) Five years of age or over and under seven.....	1,624	1,740	3,364
(b) Seven years of age or over and under fourteen.....	6,658	6,863	13,521
(c) Fourteen years of age or over and under sixteen....	1,125	1,258	2,383
	<hr/> 9,407	<hr/> 9,861	<hr/> 19,268

The law prescribes that every child between the ages of seven and fourteen years shall attend school during the entire time the public schools are in session. If a child has not completed the work of the sixth grade he must attend school until he is sixteen years of age and if he is not employed in useful occupation he must attend school until he is sixteen years of age, regardless of the grade he may have reached in the schools. Every employed child who is less than sixteen years of age must attend continuation school for a period of at least four hours a week.

The attendance officers do much to secure the attendance of children at school but, notwithstanding their efforts, there are many children in Lowell who are not sent to school with the regularity which the laws contemplate; according to the report sent to the state by the Lowell school department in 1920 the number of children between five and sixteen years of age in the public schools was 11,521 and in the private schools was 7,741; these numbers do not include those who were in the high and vocational schools and were more than sixteen years of age.

SCHOOL HOUSES

In September of this year the use of the New Moody Street and Billings Street schools was discontinued because of the falling off of the numbers in those schools. The children of the New Moody Street school were transferred to the Pawtucket school and the children of the Billings Street school were transferred to the Greenhalge school. These transfers are a move in the right direction, so far as the housing of children is concerned; we should have fewer and larger units, with all the advantages in classification, organization and supervision which are possible to the highest degree only when we have reasonably large numbers in our school units.

A seventh portable school building was provided and located at the Edson school; portable schools are, in the main, very satisfactory for the relief of temporary crowded conditions and for special uses.

In September, 1921, the enlarged Morey school should be ready for use and we should have the new high school in September, 1922. As soon as these buildings are completed, or even before their completion, there should be a careful and thorough survey of the needs of the city with respect to school buildings for a period of ten or twenty years and plans should be made for school building development in accordance with the findings of such a survey.

RESIGNATIONS, ELECTIONS, RETIREMENTS AND ASSIGNMENTS

The following lists give the changes in the roll of teachers and other employees, due to elections, resignations, retirements and assignments:

Resigned

William P. Boland	High School
Lillian Walsh Brennan	Elementary
Celia B. Wood Donovan	Elementary
Barbara Ham	Elementary
Ruth Howe	Vocational School
Helen S. Livingston	Kindergarten Teacher
Ellen A. McQuade	High School
Maguerite J. O'Dwyer	School Nurse
Margaret D. Reynolds	Elementary
A. Gertrude Stiles	Elementary
Celia Standish	Elementary
Anna McNabb Swanson	Elementary
Ruth Upton	Vocational School
Arthur K. Whitcomb	Master, Greenhalge School

Retired

Ella E. Gardner	Teacher, Charles Street School
Arthur K. Whitcomb	Master, Greenhalge School

Elected

Edith J. Atwood	Elementary
Elmer G. Brennon	Junior Submaster, High School
Katharine L. Carmichael	Clerk, School Office
James J. Clinton	Continuation School
James F. Conway	Junior Master, High School
Mary V. Coughlin	Elementary
Flora I. Common	Vocational School
Thomas F. Crowley	Vocational School
D. Murray Cummings	Master, Lincoln School
Charles E. Delorme	Master, Butler School
Julia M. Driscooll	Continuation School
Katherine L. Farley	Elementary
Dorothy Farnsworth	Kindergarten Teacher
Charles D. Foley	Continuation School
Anna M. Ford	Kindergarten Teacher
Charles W. Frost	Continuation School
M. Catherine Gallagher	Continuation School
Margaret M. Garvey	Penmanship, Elementary
John J. Gildee	Head Automobile Dep't Vocational
Theresa R. Gynn	Elementary
Margaret G. Gookin	Elementary
Mary E. Gordon	Elementary
William C. Hannafin	Continuation School
Thomas Hannafin	Head Janitor, Bartlett School
Mary E. Harrigan	High School
Margaret Harrington	Continuation School
Patrick Kelley	Schoolhouse Janitor
Mary E. King	Clerk, Continuation School
Major Colby T. Kittredge	Instructor, Physical Education, Vocational and Continuation Schools
Frances R. H. Leggat	Instructor, Phy. Education, High School

Rose V. Lettrell
 Michael J. Lynch
 Albert D. Mack
 George B. Markham
 Margaret E. McCann
 Anna T. McCarron
 M. Grace McCue
 Mary A. McKeon
 Louise E. McOsker
 George McWilliams
 Mary H. Meehan
 Frances Moriarty
 Andrew J. Moynahan
 Gertrude F. O'Brien
 Katherine M. O'Donnell
 Frances O'Neill
 Mary J. O'Neill
 Katherine C. O'Neill
 Harley N. Prescott
 Bessie D. Ranlett
 Elizabeth J. Regan
 William J. Reardon
 Myrtle Rooney
 Edna J. Rundquist
 Raymond W. Slater
 Morton A. Sturtevant
 Harry M. Tabor
 John G. Wolcott

Helen M. Lambert
 Frances U. Masterson

Thomas A. Ginty

Vera E. Groves

School Nurse
 Head Janitor, High School
 Junior Master, High School
 Schoolhouse Janitor
 Clerk, Vocational School
 Continuation School
 Elementary
 Elementary
 Teacher of Sewing
 Schoolhouse Janitor
 Head of Evening Millinery, Vocational
 Elementary
 Temp. Teacher, Vocational School
 Assistant in Music
 Elementary
 High School
 Elementary
 Continuation School
 Manual Training, Elementary Schools
 Teacher of Drawing
 Continuation School
 Continuation School
 Assistant Phy. Inst., High School
 Vocational School
 Continuation School
 Junior Sub-master, High School
 Temp. Teacher, Vocational School
 Master, Greenhalge School

Reinstated

High School
 High School

Assignments

Director of Continuation and American-
 ization Classes
 Elementary

In Memoriam

WILLIAM L. CROWLEY

Member of the School Committee

ETHEL V. CLEAVES

Physical Instructor in the High School

KATHERINE E. KELLEY

Teacher in the Butler School

BERNARD H. MAGUIRE

Janitor in the High School

JAMES L. MELLEN

Master of the Lincoln School

NELLIE T. O'GRADY

Teacher in the Eliot School

A. GRETRUDE READY

Teacher in the Charles W. Morey School

ARTHUR K. WHITCOMB

Master of the Greenhalge School

PUPILS BY GRADES

The following table shows the number of pupils in the schools, according to grades:

	Males	Females	Total
Kindergartens.....	247	243	490
Grade 1	757	755	1512
" 2	652	619	1271
" 3	585	591	1176
" 4	659	642	1301
" 5	598	556	1154
" 6	600	586	1186
" 7	491	488	979
" 8	384	343	727
" 9	311	354	665
" 10	272	306	578
" 11	188	280	468
" 12	152	190	342
" 13	98	140	238
" 14	12	5	17
Total.....	6006	6098	12104

HIGH SCHOOL

The High School graduated a class of 275 in June and there was an entering class of 594 in September. Of this class 404 were from the public schools, 103 from private schools, 75 from towns which have certificate privileges, 7 entered by examination and 12 came from out-of-town schools.

The grammar schools sent 83 per cent. of their graduates, who were certified, to the High School; the average age of the entering class was 14 years.

The graduation exercises were held in Keith's Theatre on June 23; the names of the Carney Medal students, and the names of the students who were awarded honorable mention are here given.

CARNEY MEDALS

Victor Brock Darling	Mildred Thelma Manning
James Warren Flood	Lorna Howes Shaw
Raymond Joseph Crowley	Millie Jessie Sandler

HONORABLE MENTION FOR SCHOLARSHIP

Alice Clark Bolton	Mildred Constance Leathers
Florrie Alderson	Helen Elsbeth Harrison

HONORABLE MENTION FOR ATTENDANCE

Louise Adelaide Fay	Grace Mildred Horsfall
Pearl Gertrude Hanchett	Grace Gertrude Sheehan
Harry Louis McDonough	

MEDICAL AND DENTAL SUPERVISION

The health of the children in the public schools is supervised by nine physicians and four nurses, all being under the control of the school department.

The Board of Health employs four physicians for the private schools and their names and the schools they supervise are given below:

DR. F. P. MURPHY—Immaculate Conception, St. Peter's School and Orphan Asylum, Sacred Heart, St. Stanislaus.

DR. R. C. STEWART—Our Lady of Lourdes, St. Louis', St. Patrick's for Boys, St. Patrick's for Girls, Notre Dame Academy

DR. H. W. JEWETT—Greek Orthodox, St. Michael's, St. Mary's, Mrs. Paxton's Private School.

DR. MIGNEAULT—St. Joseph's for Boys, St. Joseph's for Girls, St. Joseph's Pawtucketville, St. Joseph's Kindergarten.

The names of the school department physicians and the schools they supervise are given in the directory pages of this report.

The school department maintains a dental room in the Worthen Street School, located on Worthen Street between Market Street and Broadway. The room is open on all school days, including days when the storm signal is sounded, from nine until twelve in the forenoon, and service is free for any child from any school, public or private, for whom an appointment has been made; appointments are made by school physicians, nurses, teachers and Miss Lantagne, the dentist's assistant.

Dental Clinic report from January 1 to December 31, 1920:

Amalgam fillings.....	302	Toothaches treated.....	54
Cement fillings.....	162	Cleanings	654
Teeth extracted.....	1111	Children	795
Teeth treated.....	27		

SCHOOL NURSES' REPORT FROM JAN., 1920, TO JAN., 1921

Number of visits to schools....	2,183	Furuncle	101
Number of pupils examined (new)	8,324	Tonsilitis	15
Number of pupils re-examined	16,491	Blepharitis	43
Children excluded from schools	956	Sprains	26
Elevated temperatures.....	47	Earache	28
Desquamation of hands.....	9	Conjunctivitis	29
Chicken-pox	6	Headache	15
No vaccination mark.....	148	Abscess on finger.....	1
Pediculosis	362	Strabismus	19
Scabies	53	Simple fracture of arm.....	3
Ringworm	8	Anemia	53
Sore-throat	82	Desquamation	3
Impetigo	131	Abscess on head.....	2
Nauseated	4	Orthopedic defects Non T. B....	23
Eczema	6	Orthopedic defects T. B.....	7
Rash	11	Adhesion of cheek to gum.....	3
Bronchitis	2	Favus	1
Unclean	7	Constipation	3
Septic arm.....	1	Congenital paralysis.....	1
Ivy Rash.....	2	Enlarged turbinated bones.....	1
		Catarrh	4

Measles	21	Syncope	8
Mumps	14	Defective hearing.....	11
Whooping-cough	5	Rickets	3
Chronic appendix.....	1	Dermatitis	35
Scarlet fever.....	2	Functional hearts.....	25
Iritis	1	Organic hearts.....	83
Acute nephritis.....	1	Epileptic	2
Angina	1	Herpes	21
Body lice.....	1	Otitis Media.....	35
Scalp wound.....	1	Rheumatism	1
Herpes	1	Kidney trouble.....	4
Cough	1	Anterior staphylitis.....	8
Wet shoes and stockings.....	1	Pharyngitis	6
Laryngitis	15	Nausea	4
Pleurisy	1	Defective speech.....	12
Earache	1	Hemorrhoids	1
Contagion found in homes.....	39	Croup	1
Contagion found in schools.....	106	Corneal ulcer.....	4
Scarlet fever.....	2	Warts	10
Mumps	14	Indigestion	10
Scabies	48	Swollen jaw.....	2
Chickenpox	5	Fractured clavicle.....	1
Measles	18	Peritonsillar abscess.....	1
Whooping-cough	5	Foreign body in eye.....	1
Tooth brushes sold, gross.....	12	Refractory error.....	1
Notices sent to parents.....	7,635	Ecchymosis of eye.....	11
Personal letters written.....	73	Occlusion of tear duct.....	1
Returned improved.....	873	Myopia	2
Unimproved-still absent.....	83	Shingles	2
<i>Defects Found</i>			
Decayed teeth.....	3,737	Curvature of spine.....	2
Defective nasal breathing.....	3	Bladder trouble.....	4
Enlarged tonsils.....	1,744	Dog bite.....	2
Sore throats.....	679	Growth on face.....	3
Pediculosis	1,723	Defective Walk.....	4
Colds	598	Deviated septum.....	8
Impetigo	357	Chalazion	1
Eczema	60	Pulmonary disease.....	2
Epistaxis	1	Acne	15
Cat bite.....	1	Tonsilitis	13
Neuritis	6	Cleft palate.....	1
Chronic appendix.....	6	Rhinitis	11
Chorea	6	Paronychia	2
Contusion of ear.....	3	Canker	2
Foreign body in cornea.....	2	Wen	1
No vaccination scar.....	58	Cerumen	1
Enlarged cervical glands.....	152	Dysmanorhea	1
Abscess on face.....	2	<i>Treatments</i>	
Abscess in axilla.....	4	First aid in schools.....	994
Abscess on leg.....	2	Consultation with teachers.....	5,838
Discharging ears.....	21	Pupils advised.....	18,557
Bronchitis	4	Home visits (new).....	569
Burns on hand.....	2	Home visits (old).....	145
Alopecia	4	Hygiene talks in schools.....	1,435
Ringworm	10	Instructions in homes.....	614
Unclean	753	Pupils treated by school dentist	665
Blister on heel.....	2		

Hordeolum	31	Pupils treated by family physi-	
Malnutrition	43	cian	286
Seborrhoea	1	Tonsils and adenoids removed....	664
Hemiplegia	1	Pupils treated by oculist.....	68
Rash	29	Corrected vision (glasses).....	51
Abscess at root of tooth.....	24	Tooth brush drills.....	119
Frost bite of toes.....	1	Treated at hospital clinics.....	753
Fallen arches.....	3	Pupils weighed and measured....	317
Eye strain.....	157	Classes taught in home nurs-	
Enuresis	2	ing, Girls' Vocational School	107
Burned arms.....	4	Pupils admitted to fresh air	
Infections and lacerations.....	558	room	15

Co-operating Agencies

Massachusetts Commission of the Blind	International Institute
Lowell Guild	Charity Department
Board of Health	Lowell Humane Society
Tuberculosis Nurse	Home for Feeble Minded
Miss Skilton	St. John's Hospital
Police Court	Children's Hospital
Corporation Hospital	New England Baptist Hospital
Social Service League	Clothing and shoes donated

SIGHT AND HEARING TESTS

	Pupils Examined	Defective Sight	Per Cent. Defective	Defective Hearing	Per Cent. Defective	Parents Notified
High.....	1697	134	.079	5	.003	139
Grammar.....	5503	687	.124	122	.022	649
Primary.....	3807	285	.074	43	.011	224

SCHOOL SAVINGS BANKS

The school savings account is printed below:

	Deposits Dec. 31, 1919	Deposits Dec. 31, 1920
Bartlett.....		\$ 2,029.37
Colburn.....	\$ 3,103.93	
Edson.....		2,329.45
Greenhalge.....	5,263.02	
Charles W Morey.....	876.19	3,944.20
Riverside.....	1,747.57	
Varnum.....	1,563.41	2,554.38
Washington.....		477.76
Total.....	\$12,554.12	\$11,335.16

The increase in living costs is the cause, I believe, of the falling off in school savings. While the total amount on deposit is small, it is an evidence, nevertheless, that the principle of thrift is not neglected in the schools.

VOCATIONAL SCHOOL

The tenth year of the school opened with an enrolment of one hundred and fifty-eight boys and one hundred and three girls. The only requirement for admission to

the day classes of the Vocational School, as far as age is concerned, is that a pupil must be not less than fourteen and not more than twenty-five years of age.

All pupils must be residents of the state; for pupils who do not reside in Lowell there is a tuition charge of \$200.00 for boys and \$190.00 for girls payable by the city or town of the non-resident pupil, as the school is absolutely free to the individual pupil, regardless of his place of residence.

The work is so arranged that a boy may enter at any time and advance as rapidly as his industry and ability will allow.

The school offers preliminary training for boys as carpenters, electricians, cabinet-makers, machinists and automobile repairers.

The boys are trained mostly on productive work in all departments and the work is of such a practical nature that they fit naturally into the industry in advanced apprenticeship standing.

All the courses are planned for three years, seven hours a day, five days a week.

The courses are divided into three phases consisting of about one year's work in each. Upon the satisfactory completion of any phase a certificate is given.

If a boy gets three certificates and works at the trade for which the school has trained him, he is entitled to a diploma.

The courses have been run on a weekly schedule as follows: Shop Science, one-half day; Mechanical Drawing, one-half day; Academics, one day; Physical Exercise, two hours; the remaining two days and one and one-half hours are spent on practical work in the shops.

Four rooms 22 ft. x 32 ft. were added to the Boys' School and were ready for use and occupancy the last of December. This addition made a great improvement in the facilities for instruction in auto repairing, carpentry, drawing and science.

The number of boys increased to 170, necessitating the use of two additional rooms at the Worthen Street School. With large second and third year classes returning next September the outlook is for still more crowded conditions.

Many of the lathes in the Machine Shop which were used tools when purchased have become almost useless.

To offset this four new engine lathes and a large milling machine have been purchased; also a drill grinder and a Dalton lathe.

The equipment is as follows:

Machine Shop:—

4 milling machines, one universal, 3 shapers, 3 drills, 1 planer, 2 power saws, 1 grinder, 24 engine lathes, 2 speed lathes and other small tools and accessories.

Electrical Shop:—

7 direct current motors, from 1 to 10 HP., 4-3 phase generators, 2 motor generator sets, 1 rotary converter, 9 to 3½, 1 Tungar Rectifier, 1 metal shear, 1 winding head, 3-2 KW. transformers, measuring instruments and small tools.

Carpenter Shop:—

1 buzz planer, 1 cylinder planer, 1 combination and 1 single saw bench, 1 band saw, 1 turning lathe, 20 sets of carpenters tools, benches and auxiliary tools.

Automobile Dept.:—

1 Ford car (rebuilt), 1 N. E. Motor generator, 5 auto engines for instruction purposes, 1 starting and lighting system, 1 N. E. Dynamotor, 1 battery charger, wrenches, pliers, jacks, etc., for general repairs, 1 storage voltmeter, 1 electric testing instrument.

GIRLS' DEPARTMENT

Morrill School, Common St., Opp. North Common

(Free to all pupils living in the State of Massachusetts)

This school aims to prepare the girls of Lowell and surrounding towns for life's activities and duties; to give them a training in the branches of knowledge and the trades that are most useful in the home and in gaining a livelihood.

It is recognized that every girl preparing through any kind of an education for life will have more or less to do with a home, with the chances largely in favor of her having at some time the entire care of a home; and upon the proper management of the home depends much of the happiness and success of our community. Hence a training in home economy should be part of every girl's education.

To meet these requirements the Vocational School offers two-year courses in housekeeping, dressmaking and power machine work. In addition the school teaches academic subjects which are related to the practical work in a way that makes their value fully appreciated. Millinery is taken up in season during the second year.

Physical exercise, under direction, is an attraction of the junior and senior years.

Dressmaking—This course is planned to fit a girl for the dressmaking trade. It includes plain sewing, dressmaking, modeling, power machine work and mending.

Mending.

Patching.

Darning.

Mending of straight and hedge tears.

Millinery.

Fall and Spring Renovating.

Making of velvet, straw and lace hats.

Trimming.

Flower Making.

Housekeeping—The housekeeping course includes every thing that makes and keeps a house in good condition to live in. It teaches the buyer to get a hundred cents' worth out of every dollar spent for food and clothes. It includes cooking, household management, laundry work, table service, marketing and home nursing.

Cooking.

Economy and management of the kitchen.

1. Plain cooking.
2. Food values.
3. Simple menus.
4. Serving.
5. Marketing
6. Practical application in the home.

NOTE—Repetition develops responsibility and assurance in the cooking and serving of meals. This practical experience is gained in the lunch room of the State Normal School, now under the management of the Vocational School.

Laundry Course—Includes practice in removal of stains, washing and ironing of all articles of clothing and of household linens.

Household Engineering.

Efficient Household Arrangement.
Plans and methods for Daily Housework.
Choice and care of Household Tools.
Cleaning—Standard Practice.
Labor-Saving Devices.

Home Nursing.

Care of bedroom.
Care of patient.
Bandaging.
First Aids.
Care of the Baby.

Arithmetic in relation to:

1. Dressmaking—Millinery.
2. Personal expenditure.
3. Household.
4. Business.

English:

1. Correction and improvement of every day speech.
2. Personal and business correspondence.
3. Cultivation of a taste of reading.

Civics.

1. Government of Communities.
2. Current events.
3. Local Interests.

Economics.

1. Problem of the Standard of Living.
2. Price and Wages.
3. Industry.

Textiles.

Study of Fabrics.

1. Name.
2. Cost.
3. Durability.
4. Uses.
5. Tests.

Design.

Art as applied to a woman's clothing.

1. Color.
2. Line.
3. Fabric.
4. Appropriateness.

Handicraft.

Through stenciling, painting and needlework, the pupils learn the construction of many useful and artistic articles.

Care of the Home.

1. Furnishing.
2. Decorating.
3. Sanitation.

GIRLS' DEPARTMENT

In February, 1916, the girls' school opened the dining room at the State Normal School and since then has served dinners and luncheons to the faculty and students of the school. This gives a valuable training in preparing food in large quantities and also in serving; the practice proved to be so valuable it seemed wise to make it a permanent part of the curriculum.

The school sent out a class of ten graduates on June 22, 1920.

The State Board of Education exercises a considerable control over the school, as the state has agreed to pay one-half of the maintenance expense of the school. In order to secure reimbursement from the state, the courses of study, equipment, buildings and the work of the teachers must be approved by the agents of the State Board of Education.

EVENING VOCATIONAL SCHOOL FOR MEN

These courses are trade extension and are open only to the men employed in that line of work during the day and sixteen years of age or over.

The school opens early in October and each class meets two evenings a week, two hours an evening, for twenty weeks.

The following courses were offered:

COURSE	NO. BELONGING
Machinist	105
Auto Repair	64
Carpentry	26
Plumbing	34
Electrical Theory	40
Firemen	45
Engineers	17

Definite courses have been laid out and a system of records devised so that each man's progress and accomplishment can be kept.

Certificates are given to those whose attendance and ranks are satisfactory. On the certificates are the number of evenings attended and the kind of instruction completed.

WOMEN'S EVENING PRACTICAL ARTS

Courses in cooking, sewing and millinery are in operation in several parts of the city, from October to April, two evenings a week, two hours each evening.

The classes are for employed women and girls sixteen years or over, and 1685 women were in attendance last year.

The main work is carried on at the Morrill School, but the courses are being run at the following centers:

Butler—2 cooking and 2 sewing classes.

Colburn—Sewing and millinery classes.

Varnum—Classes in cooking, sewing and millinery were held in correlation with the Americanization classes.

Greenhalge—Cooking, sewing and millinery classes.

Pawtucket—Cooking, sewing, millinery and home nursing.

Morrill—Cooking, sewing, millinery and home nursing.

New centers were opened at the Washington, Green and Cabot Street schools, also at the Moody school and the Girls' Community Service.

Respectfully submitted,

THOMAS F. FISHER, Principal.

SCHOOL AND HOME GARDENS

To Mr. Hugh J. Molloy,
Superintendent of Schools.

The organized school garden work of Lowell during the season of 1920 was continued under the same organization as in the year previous, the "United States School Garden Army."

Three thousand boys and girls from the different schools in the city enlisted to plant and care for gardens.

The officers of the school garden army did supervisory and clerical work under the direction of the supervisor of primary grades; they visited the gardens assigned to them, and ranked them according to instructions.

When I visited the gardens of a certain district, I was generally accompanied by the captain of that district.

The United States Bureau of Education furnished me with literature, stationery, blanks, garden pins for prizes, gave me franking privileges, and Hon. John Jacob Rogers, our Congressman, supplied seeds, furnished by the United States Department of Agriculture. Without this assistance Lowell school garden work would not hold the enviable record it now does in the State and Nation. Owing to the fact that not so much emphasis had been placed on food production as in the two preceding years, there were fewer large vegetable gardens and more flower gardens.

In some districts such as the C. W. Morey, Pawtucket and Washington, nearly every child had a garden. In the Green and Edson, where there was little land available, there were many box gardens.

Reports sent to me in November told many interesting stories of a summer's work. It was difficult to put a money valuation on the work done in the whole city. The value of crops harvested by nineteen children in the Washington school district amounted to five hundred dollars. There were four hundred gardens in this district; from personal inspection I know that these gardens were cared for by pupils all during the summer season.

Every child who cared for a garden, even though he had some assistance in the preparation of the land, received a pin furnished by the U. S. Bureau of Education. Special prizes were given for the best garden in each district; this was made possible by having a small amount of money left from the fund provided by the Lowell Board of Trade last year.

A boy in the eighth grade in the Pawtucket school won the first prize for the best school garden in the city; the total valuation of all the vegetables harvested in his garden amounted to \$175.00; the only help he had received was the ploughing of a part of his land. A boy in the Middlesex Village school supplied vegetables all summer for a family of five, and had potatoes for winter use. This boy had no help, he was the "Man of the Family" as he wrote in the story of his garden. The market value of his harvest was sixty dollars. There were many gardens in which

there were vegetables harvested amounting to fifty dollars, and there were the box and porch gardens which brought pleasure and happiness to the proud owners.

One of the most unique gardens in the city was at the junction of two streets in a triangular plot of land in the middle of the road. This plot was surrounded by burdock bushes and was overgrown with grasses and low bushes. Two boys in the Abraham Lincoln school cleared the land, fertilized it and prepared it for planting; the burdock bushes were left for protection against intruders. Beans, peas, lettuce, carrots, corn, tomatoes and squash were grown in this garden.

The joint owners of this garden received cash prizes and one deposited his in the bank as the beginning of a fund to enable him to go to college.

At the close of the year 1920, the United States School Garden Army is disbanded. During the world war when there was danger of a food famine it was called into existence by the President of the United States, and the fact that school children were ready and responded was a big asset to the Nation.

An appropriation was made by Congress to assist, support and encourage the movement. Now that we have returned to normal conditions this work which has proved its worth economically and educationally is turned over to local authorities.

I do not know what the future holds for school garden work in Lowell—it has grown from one school garden and a small number of home gardens to a big organization with gardens in every district in the city, and there should be a trained supervisor in every district if the work should be continued.

In closing I quote from a recent bulletin of the U. S. Bureau of Education:

“Fortunately all educators now understand that such real experiences as children get in gardening are essential to any education worthy of the name, and that the teaching and supervision of the subject is a proper part of any school system, coming definitely under the control of the school authorities and should not be subject to any outside agency.”

Respectfully submitted,

ALICE T. LEE.

REPORT ON PHYSICAL EDUCATION

In conducting the Physical work during the past school year I have endeavored to retain the co-operation of the teaching faculty of the several grammar schools of Lowell. With their co-operation the results of the physical work have been very satisfactory.

The co-operation of the school physicians and nurses has been excellent. They have shown at all times by their willingness to help that they believe that the physical work as now carried on is beneficial to the children receiving it.

The work of my assistant, Miss Nelle Horner, has been of very high grade, and she has rendered very valuable help.

In the fall of 1920 I introduced a system of Swedish Educational Gymnastics graded for grammar school work and comprising a card system so laid out that each class has a set of twenty separate lessons so arranged that each lesson is more advanced work than the previous lesson. Each teacher has her own set of cards, a manual (A B C of Swedish Educational Gymnastics by Hartvig Nissen) and a pamphlet on marching tactics and games.

The schedule of fifteen minutes daily as laid out by the grammar masters has been carried out in a conscientious manner.

Quite a marked advance has been made in organized play during the past year, in such games as inter-class volley ball, captain ball, basket ball, base ball and numerous other games; in fact it has become so popular that inter-school games have been arranged and played very successfully. These have been conducted largely by the upper grade boys and girls, who, after having been taught the rules of such games and how to play them, have become very efficient captains and leaders and under the supervision of the teachers have conducted games with the smaller children.

The annual athletic meet of the Grammar School Boys was held on the South Common April 19, 1921 and was very successful.

The Grammar School Base Ball League, consisting of twelve teams was carried on in a most satisfactory manner.

Knowing that the results of Physical Training are especially beneficial to those suffering from poor sitting or standing posture, improper method of breathing, lack of fresh air, improper care of the body, round shoulders, flat

chests, hollow backs, flat feet and faults in the neck, shoulders and hips, we have given close attention to the following:

1. Examination for defects of individual pupils while standing.

2. Inspection for defects of individual pupils while marching.

3. Inspection for defects of individuals while exercising.

I am satisfied that the work as accomplished during the past school year has proven very beneficial to the children as a whole.

The Accident Prevention work for which I am responsible in the Elementary schools of Lowell has proven of great value to the school children and has been a great factor in cutting down the casualties among the school children of Lowell.

The fire drills in the Elementary schools of Lowell have been worked out so that I am satisfied that in case of fire the discipline and control of the teachers in marching their classes out of school as they do has practically eliminated all danger to those taking part in the drills.

At this time I would like to thank the members of the School Committee for the support given me in furthering Physical Training and Accident Prevention work in the Elementary schools, also the Superintendent of Schools, Mr. Hugh J. Molloy, for his earnest support, consideration and advice in the above work.

Respectfully submitted,

WALTER R. JEYES, Director of Physical Training.

REPORT OF THE SUPERVISOR OF PRIMARY GRADES AND KINDERGARTENS

The entering age of children to the primary school having been changed at the close of the last school year from five years to five years and three months, teachers of the first grade find that their pupils, as a class, have been better able to grasp the work of the grade this year than in previous years. Still better results are looked for next year, when the entering age will be five years and six months.

Sub-primary work has been commenced in some kindergartens and has proved very satisfactory. A more definite plan is being worked out for next year in order to unify the work in all kindergartens.

Owing to the number of non-English speaking children who enter our schools, conditions are not the same in different sections of the city. In some schools more than ten different nationalities are represented; these children of different nationalities come from homes where no English is spoken and where customs and manners are different.

The kind and manner of instruction given to such children must be different from that given to our own children, and when both English and non-English speaking children are in the same room much valuable time is lost.

In the kindergarten pupils get oral language and are prepared for primary work; the problem is different in the primary school where the mechanics of reading, oral expression, and the beginning of written language must be taught.

If this work is well done in the lower grades there is less retardation in the higher grades, but it cannot be well done in over-crowded schools with mixed classes of children.

There have been special classes in the Green and Colburn districts for non-English speaking children of grammar school age.

A class recently formed in the Ames Street primary school has greatly improved conditions in the Ames Street and Colburn primary schools. The appointment of a teacher to help in the Worthen Street and Cross Street schools, giving one half day to each school, has proved beneficial.

Much has been done to improve conditions in over-crowded schools, and there is more that could be done were there more rooms and more teachers.

We are fortunate in having a very clearly defined "Course of Study" with minimum and maximum requirements. All primary grades, no matter what the conditions may be, are expected to complete the minimum requirements.

The reading, on account of our uniform phonetic system and the amount and kind of reading material supplied by the School Department, is excellent in the greater number of primary schools. As soon as children have acquired the power to read, they love to read.

Teachers wish to express their appreciation to our Superintendent and School Board for the ability to foster this love of reading in their pupils by being generously supplied with the best and latest reading books.

Respectfully submitted,

ALICE T. LEE.

JUNIOR HIGH SCHOOLS AND CHANGES IN GRADES

In August, 1919, Superintendent Van Sickle of Springfield was employed to make a brief survey of the Lowell school situation with special reference to junior high school organization.

Mr. Van Sickle's report, strongly favoring the junior high school organization, was submitted before the end of August, and at a meeting on September 3, 1919, the superintendent was instructed by the School Committee to prepare and submit a scheme for the reorganization of the schools of the city under the 6-3-3 system with junior high schools and eight grades instead of nine.

On December 3 the superintendent submitted a report containing the results of his investigation and making a number of specific recommendations.

The following statement characterizing the junior high school, was an important item in the report.

What is a junior high school? A junior high school is a school which combines the last two grades of the elementary or grammar school system and the first or freshman year of the high school; according to the best standards it should be maintained in its own properly-equipped building since it is a school of distinct character and purpose, but it may be and is maintained in buildings which contain other grades or units. But, as a part of a 6-3-3 system, and I refer to the 6-3-3 system as it is understood by all educators and administrators, a true junior high school must present certain definite features.

1. It should show a segregation or grouping in one school location of the children of the last two grammar school and the first high school years of a district of considerable size because these children form a rather distinct group as to age and temperament, and in order that their instruction will be so devised as to make an easy transition from elementary to high school methods.

2. Larger numbers of children than the ordinary grammar school has in its last two grades should be brought together in the junior high school group so that there may be a differentiation or a proper classification of children according to their tastes, tendencies, abilities, future courses of study in the high school, or occupations at the completion of their school attendance.

3. The junior high school should offer such range of subjects and activities as will serve to discover and test out the tastes, abilities and inclinations of boys and girls to a greater extent than is now possible in the ordinary type of grammar school.

4. The teaching in all large or important subjects should be departmental; that is, the teacher of any subject should be a specialist in that subject and should give his time in the school almost exclusively to that subject, it being understood, however, that each child shall be assigned to a regular or "home-room" teacher who will have charge of all his minor subjects and have a personal interest in his attendance, conduct and general well-being.

5. There should be in the junior high school a closer and more intimate relation with the high school with regard to supervision, direction and co-operation than generally exists between the ordinary grammar school and the high school.

6. The courses offered in the junior high school should be such courses as may or will be continued in the senior high school and the method of treating them should be such as will harmonize with the continuation of those courses in the high school.

7. The third year of the junior high school unit must do fully and thoroughly the work of the first or freshman year of the senior high school so that the boy or girl who completes the three years of the junior high school organization will enter high school as a member of the second year or sophomore class.

Any 6-3-3 system or junior high school system which does not show the characteristics which have been referred to in the preceding seven points is not a 6-3-3 or junior high school system. If we are to have junior high schools, true junior high schools, we must arrange junior high school districts and bring together at each one of several central points all of the upper-grade children who are contained in the several grammar schools of a district. Segregation, differentiation, variety of courses, and proper equipment cannot be provided for on any other basis.

After consideration of the recommendations, the committee adopted the following measures:

1. That no material or considerable change be made in the organization, grading, courses of study, assignments of teachers, or locations of pupils until the beginning of a new school year in September.

2. That detailed plans be prepared forthwith, courses of study arranged, teachers prepared, and necessary equipment provided for the organization of the Bartlett School as a Junior High School for the children of the Bartlett-Green-Pawtucket district; for the organization of a Moody-Riverside-Colburn district with the Moody School

as center and the Varnum-Greenhalge district with the Varnum School as center, said organization to go into effect in September, 1920.

3. That the organization of Junior High School units in the other districts of the city be entered upon as soon as a suitable addition in the Highland district and a suitable building in the Edson-Butler district shall have been provided.

4. That a formal inquiry be made of all teachers who are interested in junior high school work as to their qualifications, that courses be suggested for the suitable preparation of teachers who aspire to this work and that teachers for any grade of junior high school work, as such work may be established in the future, be selected by the superintendent of schools with the advice of the principal of the junior high school in which the teacher is to serve and of the high school department-head with whose work in the senior high school the work of the teachers in the junior high school will correlate, such selection to be with the approval of the school committee.

5. That in junior high school organizations the salary of the teacher who does purely elementary work be on the elementary schedule, the salary of the teacher who does exclusively work of high school character be on the high school schedule and that the salary of a teacher whose work is a combination of elementary and high school work be on a schedule between the elementary and the high schedule.

6. That the method of changing from nine grades to eight be along the lines referred to in the discussion of city No. 3 in the report; that high school studies be dropped down gradually into the ninth grade, that some important work of the eighth grade be dropped down to the seventh, so that little by little and by steady advances the work done in what we now call the seventh, eighth and ninth grades may become the work of what we now call the eighth, ninth and high school freshman classes; this work can be done to good advantage, however, only where we bring together larger groups of children than we are dealing with at present.

7. That the entering age of children in first year primary be raised gradually, perhaps three months each year for a period of three years, and that plans be made for a gradual enlargement of the sub-primary or kindergarten class for the accommodation of children between the ages

of four or four and one-half and five and three-quarters years.

8. That the study of Latin and French as electives and the study of algebra, constructional geometry, and commercial subjects, and practice in manual and domestic arts be gradually introduced or extended in what are now the eighth and ninth grades with a view to the merging of those grades eventually into the last grammar and the first high school year grades. That changes in the organization of the schools be made with a view to the enlarged capacity of the high school within the next three years and of the Morey school within two years.

9. That the headmaster and heads of departments of the high school and the masters and principals of grammar schools be consulted and advised with from this time on in the carrying out of this school policy."

Early in the year 1920 the School Committee approved the plan to place the Bartlett school on a junior high school basis, this plan including the transfer to the Bartlett school of the upper grades of the Green and Pawtucket schools in September.

A further study of the plan, however, led to the conclusion that it would be best to transfer for the first year only the seventh grades of the Green and Pawtucket schools; the result of this change was that when the school opened in September it was not at once filled to capacity and opportunity was given for a gradual adjustment of classes and teachers to the new plan; at the same time the Green and Pawtucket schools were not so radically changed in their organization as they would have been had their seventh, eighth and ninth grades been removed at once.

By September, 1922, the Bartlett school will have all the children of the district who are above the sixth grade and the Green and Pawtucket schools will be elementary schools of only six grades.

The organization which has been begun in the Bartlett school district will be started in the Morey school district in September, 1921, and we shall be able by gradual and careful development to secure a classification and variety of work for the children of those districts which could not be secured under the old conditions.

CONTINUATION SCHOOLS

The act of the Legislature, establishing continuation schools for all employed minors between the ages of fourteen and sixteen years, approved July 15, 1919, was accepted by the voters at the state election in November, 1919.

The law prescribes school attendance of not less than four hours a week for employed minors, and such attendance must be between eight o'clock in the morning and five o'clock in the afternoon on any working day except Saturday.

In most cities the housing of the continuation pupils presented the great difficulty; we were fortunate, however, in being able to provide very satisfactory accommodations by using for afternoon sessions the building known as the high school annex, this use being made possible by a slight change in the hours of attendance for the freshman class in the high school.

The school opened in September with a principal and twelve teachers, six women and six men; three men and three women were assigned to academic work and the others to vocational work.

The teachers had taken a preliminary course of training at Hyannis normal school in August and the school was opened under very favorable auspices.

In order to secure kitchen accommodations for the girls who elected cooking, one class of girls was assigned to the Green school, an arrangement which was made possible by placing the ninth grade in that school on a one-session basis.

The opening registration of the school was eleven hundred, six hundred boys and five hundred girls. Half the time of each pupil is spent upon academic work; the girls devote the remainder of their time to work in dress-making, millinery and cooking, and the boys to shop work of various kinds and mechanical drawing.

Time will undoubtedly prove the value of this new type of school, and will also prove that continued contact with school during their first two years of employment will advance the welfare of our boys and girls to a marked degree.

EVENING SCHOOLS

The administrative and teaching force for the evening schools of Lowell is the same as for the day schools, except in those departments where the registration for evening classes is so large as to necessitate the employment of

extra or special teachers. The evening schools which we maintain are public schools and prescribed by law just as the day schools are; in some respects, indeed, the work of evening classes is more difficult than the work of day classes, and from some considerations inherent in the problem of evening schools we might easily reason that they should have better teachers than those in the day schools, if we were able to secure them.

The evening schools have been well attended, and attendance, for the most part, has been voluntary. Americanization classes for adults and vocational classes, these being maintained in part by the state, have been very satisfactory.

Early in the year mill classes in English and civics were established in the Massachusetts mills; these classes had their sessions at noon and late in the afternoon and were taught without exception by regular teachers.

SCHEDULE OF SCHOOL SESSIONS AND VACATIONS

High School:—8.40 A. M. to 1.40 P. M. (Freshmen 7.50 A. M. to 12.50 P. M.)
 Junior High School:—8.30 A. M. to 11.30 A. M. and 1.15 P. M. to 3.45 P. M.
 Elementary Schools:—8.30 A. M. to 11.30 A. M. and 1.45 P. M. to 3.45 P. M.
 Middlesex Village:—9 A. M. to 12 M. and 1.30 P. M. to 3.30 P. M.
 Lexington Avenue:—8.45 A. M. to 11.45 A. M. and 1 P. M. to 3 P. M.
 Vocational School, Boys':—8.30 A. M. to 12 M. and 12.30 P. M. to 3.30 P. M.
 Vocational School, Girls':—8.30 A. M. to 12.30 P. M. and 1 P. M. to 3.30 P. M.
 Evening High School:—7 to 9.
 Evening Vocational Schools:—7.15 to 9.15.
 Evening Elementary Schools:—7 to 9.

VACATIONS

Summer Vacation—from the Wednesday preceding the last Friday in June to the second week in September.

The week which includes Christmas.

The week beginning with the ninth Monday and the week beginning with the eighteenth Monday after the Christmas vacation.

Hours for ringing the no-school Signal:—7.15 A. M., 12.45 P. M. and 6.05 P. M.

SUMMARY OF EVENING SCHOOL ATTENDANCE

For Term 1919-1920

SCHOOLS	Number of Rooms in Each School		Teachers at Beginning of Term		Teachers at Close of Term		Evenings Taught		Whole Number on Register			Average Number Belonging			Average Attendance			Per Cent. of Attendance	Minors Unable to Read and Write in English		
									Males	Females	Total	Males	Females	Total	Males	Females	Total				
High.....	37	37	35	75	600	860	1460	285	418	703	232	357	589	81							
Cabot St.....	2	2	2	68	69	69		45	45												
Edson.....	5	4	5	68	90	61	151	50	31	81	41	26	67	83	7	17	24				
Green.....	8	11	11	68	222	133	355	89	85	174	72	70	142	83	39	10	49				
Greenhalge.....	3	3	3	68	78	60	138	25	27	52	22	22	44	85	14	32	46				
Totals.....	55	57	56	347	990	1183	2173	449	606	1055	367	512	879	83	60	84	144				

REPORT OF ATTENDANCE OFFICERS FOR THE YEAR 1920

	Total Number Cases Investigated	Absentees	Truants	Wandering on the Streets	Visited Second Time	Visited Third Time	Arrested	Sent to the Middlesex County Training School	Placed on Probation	Prosecution of Parents	Violating the Rules of School	Employment Cert. Issued 14 to 16 yrs.	Educational Cert. Issued 16 to 21 yrs.	Illiterate Certificates
January.....	362	340	22	62	22	5	0	0	0	1	0	140	461	86
February.....	156	149	7	38	10	0	0	0	0	1	0	111	393	69
March.....	483	431	52	59	38	8	1	0	1	0	0	203	558	92
April.....	306	260	46	65	15	2	2	1	1	0	0	209	572	113
May.....	420	358	62	73	30	4	3	3	0	0	0	222	533	108
June.....	153	124	29	74	6	1	0	0	0	0	0	220	734	158
July.....												141	543	102
August.....	259	238	21	46	12	0	0	0	0	0	0	100	446	122
September.....	436	374	62	68	48	7	3	1	2	0	0	271	524	161
October.....	285	258	27	58	27	5	2	0	0	1	0	65	294	61
November.....	254	231	23	49	14	0	0	0	0	0	0	23	174	46
December.....												30	63	31
Totals.....	3114	2763	351	592	222	32	11	7	4	3	0	1735	5295	1149

Employment Certificates Issued.....	1735
Literate Educational Certificates Issued.....	5295
Illiterate Educational Certificates Issued.....	1149
Special Part Time.....	35
Home Cards.....	38
Vacation Certificates.....	459
Total.....	8711

CONCLUSION

School systems of today, in large cities especially, are very complex, but much of their complexity, to one who will take the proper time and means for studying them, is very simple.

Many new activities have come into the schools in recent years and have so clearly demonstrated their value that they have become fixed in the system, some of them having been prescribed by law after a time.

It must be remembered that we are dealing with the great problem of general education, the education of all the children of all the people, as it has never been dealt with before on so large a plan in the history of the world. The schools are the "greatest community enterprise" and as such need the direction and care of the wisest, best-trained and most public-spirited men and women in the community.

Respectfully submitted,

HUGH J. MOLLOY,
Superintendent of Schools.

ROLL OF TEACHERS

Giving name, subjects or grade taught and residence

HIGH SCHOOL

Kirk and Anne Streets

Henry H. Harris, Head Master, 93 Eleventh.....	\$3,700
Frederick R. Woodward, Sub-Master and Head of Dept. of Mathematics 24 Sanders Ave.....	3,200
Fred Albinson, Bookkeeping, 8 Newbury.....	2,400
Jennie L. Allen, Physics, 947 Middlesex.....	1,780
Alice H. Bacheller, Typewriting, History IV, Commercial Law and Arithmetic	1,780
Adelaide Baker, Head of Department of French, 136 Myrtle.....	1,880
Orton E. Beach, Stenography and Office Training, 859 Chelmsford.....	2,400
Emma L. Bradley, French, 11 Belmont.....	1,780
Elmer G. Brennon, Junior Sub-Master, Mathematics, 97 Georgia Ave.....	2,600
C. Fred Campbell, Manual Training, 226 Princeton.....	2,400
Marietta Cassidy, Latin, 4 Fifth Ave.....	1,780
M. Mabel Cassidy, History, English and French, 44 B.....	1,780
Helen E. M. Choate, Mathematics, 21 A.....	1,280
Alice L. Cluin, Latin and Algebra, 130 Fort Hill Ave.....	1,680
James F. Conway, Junior Master, Chemistry and Physics, 113 Went- worth Ave.	2,800
Grace D. Donovan, History IV and English, 256 Branch.....	1,780
Ruth L. Eaton, Assistant to Principal, 59 Pine.....	1,780
Esther Elliott, Algebra and Latin, 25 Fairview.....	1,580
Edith C. Erskine, Botany, German and History, 25 Clark Road.....	1,680
Ethel M. Everett, Algebra, Civics and Ancient History, 74 Fort Hill Ave.	1,780
Bertha W. Ferguson, Bookkeeping, 100 Myrtle.....	1,780
Florence R. Foote, French, Algebra and History, 28 Wannalancit.....	1,780
John J. Gardner Algebra, Commercial Law and Arithmetic, 17 Waterford	1,480
Grace M. Goodhue, Ancient History, 120 School.....	1,780
Peter J. Gulesian, Manual Training, Blanchard Ave., Billerica.....	2,270
Mary E. Harrigan, Latin, English and Commercial Geography, 50 Highland	1,180
E. Irene Hogan, English and Alegbra, 117 Clark Road.....	1,280
Bessie E. Huntoon, French, 64 Warwick.....	1,780
Bertha C. Huse, Pianist, 1125 Middlesex.....	1,050
Elizabeth Irish, English and Geometry, 11 Willow.....	1,380
Mary M. Joyce, Expression, 82 Eleventh.....	1,780
Mary H. Killpartrick, Commercial Georgraphy, History IV and English, 27 Maryland Ave.....	1,780
..... M. Lambert, Physics and Chemistry, 283 Pawtucket.....	1,780
Genieve E. Lawrence, Algebra and English, 53 Berkeley Ave.....	1,680
Frances R. H. Leggat, Physical Director. 640 Broadway.....	1,180
Albert D. Mack, Junior Master, Head of Commercial Department, 20 Wentworth Ave.	2,800
Mary L. Martin, Latin and English, 39 Durant.....	1,780
H. Estelle Moors, Algebra and English, 104 Moore.....	1,580

Elizabeth H. Murphy, French, History IV, Commercial Law and Arithmetic, 159 White	1,780
Donald R. MacIntyre, Physical Director, 20 Webber.....	2,270
John D. McKinley, Latin, 474 Beacon.....	2,130
Loretto A. McManmon, English and Algebra, Dracut, Mass.....	1,580
Frances O'Neil, Algebra and Geometry, 12 Osgood.....	1,180
Flora A. Owen, Stenography, Typewriting and Bookkeeping, 42 Hunt- ington	1,780
Esther A. Owens, Latin and English, 4 Belmont.....	1,280
Joseph G. Pyne, Greek and English, 116 School.....	2,400
Gertrude A. Rodliff, English, Chelmsford Centre.....	1,780
G. Myrtle Rooney, Assistant Physical Director, 238 Pine.....	1,180
Ida L. Samuels, Stenography and Bookkeeping, 52 Crawford.....	1,780
John J. Savage, English, Greek, History, Physiology and Commerical Geography, 56 Simpson Ave., Somerville.....	2,130
Ruth L. Sawyer, English, Algebra and Civics, 169 Fairmount.....	1,480
Charles E. Seede, Manual Training, 476 Merrimack.....	2,470
Millie A. Severance, English and Physics, 302 Stevens.....	1,780
James A. Shanley, Bookkeeping, 364 Lawrence.....	2,400
Margare V. Spear, French 576 Westford.....	1,780
Mary G. Stevens, English and History, 57 Belmont Ave.....	1,780
Alice O. Stickney, English, Astronomy and Geology, 599 School.....	1,780
Morton A. Sturtevant, Junior Sub-Master, Head of Department of English 50 Rea	2,500
Edward J. Thompson, Physiology and Spanish, Chelmsford Centre.....	2,010
Mary E. Tobin, English and History IV, 52 Highland.....	1,780
Susie L. D. Watson, History IV, 390 E. Merrimack.....	1,780
Nathan Pulsifer, M. D., Medical Director, 473 Beacon.....	200
Major Colby T. Kittredge, Military Instructor, 48 So. Walker.....	1,000

Janitors

Michael J. Lynch.....	10 Orford
Herbert R. Baker.....	9 Shedd
Patrick J. Clark.....	199 Pleasant
Arthur H. Dana.....	52 Myrtle
Michael H. Finnegan.....	141 Fayette
William Mack.....	37 May
Charles E. Thornton	50 Highland
John J. Moran.....	43 Anderson

GRAMMAR SCHOOLS

BARTLETT SCHOOL

Wannalancit Street

(Normal Training School)

(Junior High School)

Charlotte M. Murkland, Principal, 179 Pine.....	\$2,570
Sara E. Ames, gr. 9, 8, 7, History, Physical Work and Penmanship, 418 Walker	1,730
Edith J. Atwood, gr. 8, 7, English and Office, 19 Robbins.....	1,730
Kathleen E. Driscoll, gr. 9, 8, 7, Geography, 47 Grace.....	1,730
Katherine F. Farley, gr. 5, Lowell, R. F. D., No. 3.....	1,480
Katherine L. Farley, gr. 6, Lowell, R. F. D., No. 3.....	1,000
Eleanor J. LeLacheur, gr. 4, 128 Fourth.....	1,480
Helen Mansfield, gr. 7, History and English, 12 White.....	1,490
Addie B. Merrill, gr. 7, Mathematics, 465 Bridge.....	1,730
E. Belle Perham, gr. 4, 100 Riverside.....	1,480

Belle A. Prescott, gr. 9, 8, 7, English, 50 Mt. Vernon.....	1,730
Bessie D. Ranlett, Drawing, 95 Sanders Ave.....	1,550
Maria W. Roberts, gr. 5, 50 Mt. Vernon.....	1,480
Charles J. Rodgers, Manual Training, 166 Pine.....	2,250
M. Beatrice Shea, gr. 9, 8, 7, English, Music, Penmanship and Physical work, 267 Walker.....	1,570
Alice D. Sunbury, gr. 9, 8, 7, English and Domestic Science, 179 Pine.....	1,830
Amy L. Tucke, gr. 9, 8, Mathematics and Music, 111 Butterfield.....	1,730
Mary F. Wallace, gr. 6, Temporary Assignment, grades 5 and 6, 98 Grove.....	1,240

Janitors

Thomas F. Hannafin	15 Sargent
John J. Shields	120 Bartlett
John T. Rogers.....	384 Concord

Cleaner

Mrs. Susan Moran.....	50 Claire
-----------------------	-----------

BUTLER SCHOOL*Gorham Street*

Charles E. DeLorme, Master, Algebra, 136 Bellevue.....	\$1,900
Delia T. Brady, gr. 9, 8, 7, Geography, 183 Chapel.....	1,480
Helen L. Clark, gr. 9, 8, 7, Grammar and Language, 222 High.....	1,480
Marguerite J. Cronin, gr. 9, 8, 7, Reading and Literature, 228 Plain.....	1,480
Mary E. Crowley, gr. 6, 75 Liberty.....	1,480
Annie J. Devine, gr. 6, 154 Carlisle.....	1,480
Theresa R. Glynn, Groups, 196 Pleasant.....	1,000
*Margaret G. Hyde, gr. 4, 900 Central.....	1,480
**Sarah D. Ivers, gr. 4, East Chelmsford.....	1,480
Mary E. Lane, gr. 9, 8, 7, Domestic Science, 12 Ellsworth.....	1,580
Mary L. McSorley, gr. 5, 40 Huntington.....	1,480
Nellie F. Murphy, gr. 9, 8, 7, Arithmetic, 85 Sherman.....	1,480
Alice C. O'Brien, gr. 6, 300 Wilder.....	1,480
*Mary G. Quinn, gr. 4, 28 Chapel.....	1,480
Margaret K. Riordan, gr. 5, 8 Suttle Ave.....	1,480
Charles E. Seede, Manual Training, 476 Merrimack.....	540
Sadie E. Tully, gr. 9, 8, 7, History and Civics, 111 Westford.....	1,480

* Room in Carter St. School. ** Room in Weed St. School.

Janitors

Terrance F. Casey.....	163 Howard
Thomas M. Keegan.....	22 Ellsworth

COLBURN SCHOOL*Lawrence Street*

Helen M. Shean, Prin., Language and Grammar, 260 High.....	\$1,900
Anna J. Cawley, gr. 8, History, 83 Rogers.....	1,480
Sadie A. Connor, gr. 6, 73 Pleasant.....	1,480
Elizabeth A. Conway, gr. 5, 219 Church.....	1,480
Alice G. Donohoe, gr. 7, Geography, 50 Linden.....	1,480
Caroline A. Downey, gr. 5, 56 Huntington.....	1,480
Margaret C. Fox, gr. 9, Arithmetic and Domestic Science, 8 Eddy.....	1,580
Vera E. Groves, gr. 4, 362 East Merrimack.....	1,480
Louise C. Thomas, gr. 4, 85 Eleventh.....	1,480

Janitor

Patrick J. Mahoney.....16 Lyon

*EDSON SCHOOL**Highland Street*

Leo A. King, Master, 4 Astor..... \$2,820
 Mary F. Concannon, gr. 6, 204 Pleasant..... 1,080
 Anna E. Donovan, gr. 9, 8, 7, Geography, 26 Madison..... 1,480
 Marianna L. Donovan, gr. 4, Domestic Science, 256 Branch..... 1,580
 Marietta G. Gormley, gr. 4, 22 Lyon..... 1,480
 Kate J. Hayes, gr. 6, 15 Floyd..... 1,480
 Delia C. Maloney, gr. 5, 70 Elm..... 1,480
 Margie F. Marren, gr. 4, 86 Rolfe..... 1,480
 Marietta E. O'Neill, gr. 9, 8, 7, History and Civics, 11 Carter Ave..... 1,480
 Frances M. Webster, gr. 9, 8, 7, English Composition, 45 Varney..... 1,480

Janitors

John H. Condon.....96 Midland
 William P. Black.....900 Central

*GREEN SCHOOL**Merrimack Street*

Elizabeth Provencher, Principal, 22 West Bowers..... \$1,580
 Hannah M. Barrows, gr. 9, Domestic Science, 6 Hunt..... 1,580
 Agnes T. Courtney, gr. 5, 11 Marsh..... 1,480
 Mary F. Devine, gr. 8, 1527 Gorham..... 1,480
 Carrie E. Erksine, Special, 74 Fort Hill Ave..... 1,480
 Jennie E. Fay, gr. 6, 115 Stackpole..... 1,480
 Mary V. Johnson, gr. 4, 183 Wilder..... 1,480
 Jane T. Johnston, gr. 4, 33 Webber..... 1,160
 Katherine F. McCarthy, gr. 5, 647 Market..... 1,480
 M. Alice McCue, gr. 6, 536 Rogers..... 1,480
 Lizzie A. Nolan, gr. 6, 210 Pawtucket..... 1,480

Janitors

Oscar W. Brown.....35 Livingston Ave.
 William S. McKenzie, jr.....87 Gershom Ave.

*GREENHALGE SCHOOL**Ennell Street*

John G. Wolcott, Master, 115 Nesmith..... \$2,620
 M. Alice Cochrane, gr. 7, Literature and Composition, 230 Cabot..... 1,480
 Mary Margaret Cowell, gr. 7, History and Civics, 22 London..... 1,480
 Esther G. Donlan, gr. 9, Grammar and Domestic Science, 756 Westford... 1,580
 Josephine S. Dunlavey, gr. 5, Music, 76 Canton..... 1,480
 Catherine T. Gillick, gr. 4, 998 Lakeview Ave..... 1,240
 Alice Louise Joyce, gr. 6, 82 Eleventh..... 1,480
 Helen Kohawn, gr. 4, 63 Thirteenth..... 1,480
 Alice A. Masterson, gr. 5, 14 Oakland..... 1,480
 Ellen Theresa Muldoon, gr. 8, Mathematics, 998 Lakeview Ave..... 1,480
 Leona Mildred Small, gr. 6, Music, 46 Whitney Ave..... 1,480

Janitors

John Barrett19 Burnside
 David E. Cornock.....821 Bridge
 James Hounsell704 Bridge

ABRAHAM LINCOLN SCHOOL

Chelmsford Street

D. Murray Cummings, Master 64 Temple.....	1,720
Mabel W. Ewings, gr. 5, 3 Astor.....	1,480
Ellen L. Floyd, gr. 4, 124 Stevens.....	1,480
Irma V. Hodgman, gr. 9, Mathematics, 632 Westford.....	1,480
Margaret S. Jamieson, gr. 5, 19 West Forest.....	1,480
Harriet L. McAloon, gr. 8, Literature, 112 Sixth.....	1,000
Margaret G. McDonald, gr. 6, 397 Broadway.....	1,480
Mary T. O'Neil, gr. 6, 175 Walker.....	1,160
Elsie M. Puffer, gr. 4, 942 Middlesex.....	1,480
Dorothy F. Riordan, gr. 7, 8 Suttle Ave.....	1,000
Margaret M. Sparks, gr. 9, History, 169 Fort Hill Ave.....	1,480
Bride T. Sweeney, gr. 7, Grammar, 12 Cascade Ave.....	1,480
Sadie A. Taff, gr. 8, Composition, 235 Stackpole.....	1,240

Janitors

Edward Cullen	9 Auburn
Thomas F. Quinn.....	30 Weed

MOODY SCHOOL

High and Rogers Streets

William S. Greene, Master, Arithmetic and Algebra, 302 Nesmith.....	\$2,820
Katherine F. Baker, gr. 6, 665 Andover.....	1,480
Mary F. Carolan, gr. 9, Arithmetic and Domestic Science, 256 Concord....	1,580
Frances E. Garrity, gr. 5, 74 Stevens.....	1,480
Margaret C. Gookin, gr. 6, 824 Rogers.....	1,240
Frances E. Hardman, gr. 5, 18 Astor.....	1,480
Gertrude A. Hessian, gr. 7, History, 178 Perry.....	1,240
Fannie G. Hobbs, gr. 4, 60 Porter Terrace.....	1,480
Cora E. Jones, gr. 4, 62 Huntington.....	1,480

Janitors

John O'Connor.....	102 Pleasant
Bernard J. Tracy	15 Abbott

CHARLES W. MOREY SCHOOL

Pine and Wilder Street

William W. Dennett Master, History and Algebra, 400 Stevens.....	\$2,820
Lillian E. Alister, gr. 5, 71 Wedge.....	1,480
Leonora K. Battles, gr. 8, Arithmetic, 21 Chester.....	1,480
Ella M. Breene, gr. 6, 17 Florence Ave.....	1,480
Anna A. Burnham, gr. 7, Grammar, 242 Liberty.....	1,480
Anna T. Coffey, gr. 8, History and Spelling, 16 Belmont.....	1,480
Annie V. Donoghue, gr. 9, Arithmetic, 11 Wesley.....	1,480
Mary F. Foss, Domestic Science, 351 Parker.....	1,580
Hazel A. Gardner, gr. 7, Geography and Penmanship, 15 Columbus Ave.....	1,160
Minnie C. Gray, gr. 6, 106 Liberty.....	1,480
C. Ethel Hale, gr. 7, History, 15 Robbins.....	1,480
**Mae A. Hogan, gr. 4, 35 Glenwood.....	1,480
A. Loretta Mahoney, gr. 6, 5, 4, Geography, Music and Spelling, 22 Burlington Ave.	1,480
Katharine M. O'Donnell, gr. 8, 7, 6, Geography, Music and Oral Composition, 148 Fort Hill Ave.....	1,080

**Minnie Owens, Special, 4 Belmont.....	1,480
Charlotte A. Parsons, gr. 4, 11 Belmont.....	1,480
Grace Scribner, gr. 4, 70 Tyler Park.....	1,480
Lulu Turner, gr. 5, 33 Warwick.....	1,480
Katharine M. Usher, gr. 7, 6, 32 So. Walker.....	1,480
**Grace F. Ward, gr. 5, 438 Westford.....	1,480
Estelle L. Whitney, gr. 9, 13 Oakland.....	1,480
**Rooms in Franklin School.	

Janitors

Elmer E. Harder	1066 Middlesex
Harrison L. Morgan	36 Waite

*PAWTUCKET SCHOOL**Mammoth Road*

William P. Barry, Master, 1280 Middlesex.....	\$2,820
Delia F. Briscoe, gr. 8, Lowell, R. F. D. No. 3.....	1,480
Anna I. Cassidy, gr. 6, 4 Fifth Ave.....	1,480
Corrinna G. Cover, gr. 4, 16 Lombard.....	1,480
Clotilda A. Delaney gr. 4, 82 Colonial Ave.....	1,480
Goldie M. Gardner, gr. 5, 15 Columbus Ave.....	1,480
Loretta Kinsela, gr. 6, 50 B.....	1,480
Mary A. McKeon, gr. 5, 37 Orchard.....	1,000
Lettie R. McMaster, Open Air Room, 56 Rolfe.....	1,400
Julia B. Riordan, gr. 9, 27 Woodward Ave.....	1,580

Janitors

James S. Somerset.....	104 Woodward Ave.
John Roarke	9 Sixth Ave.
Thomas J. McGee.....	83 White

*RIVERSIDE SCHOOL**Woburn Street, Wigginvillle*

Rosalie T. Burns, Principal, gr. 9, 8, 39 Whitehead Ave.....	\$1,780
Elizabeth A. Gilinson, gr. 6, 3 Bourne.....	1,480
Christine M. Kane, gr. 5, 4, 339 High.....	1,580
Harriet L. Wheeler, gr. 7, 64 Morton.....	1,480

Janitor

John H. D. Toy.....	7 Nelson Ave.
---------------------	---------------

*VARNUM SCHOOL**Myrtle Street*

Elizabeth C. Kennedy, Principal, Grammar, 223 Pine.....	\$1,720
Florence E. Archibald, gr. 5, 112 Fremont.....	1,480
Susan F. Burbank, gr. 8, History, Chelmsford Centre.....	1,480
Rose A. Dowd, gr. 6, 127 Beacon	1,480
Agnes T. Fay, gr. 6, 123 Third.....	1,480
Mary A. Fay, gr. 7, 123 Third.....	1,480
Grace E. Frye, gr. 8, Domestic Science and Geography, 93 Vernon.....	1,580
Ruth F. Hathaway, gr. 4, 106 Durant.....	1,240
Ada E. Hoole, gr. 4, 465 Bridge.....	1,480
Margaret F. Howe, gr. 5, 208 South.....	1,480
Alice R. Keese, gr. 5, 168 Sixth.....	1,480
Alice F. Morrill, gr. 4, 56 Sixth.....	1,480
Mary R. Seery, gr. 7, Arithmetic and Geography, 127 Beacon.....	1,480
H. Madeline Sullivan, gr. 7, Grammar and History, 250 Rogers.....	1,000
Grace M. Thurber, gr. 9, Grammar and Geography, 42 Mansur.....	1,480
Charlotte C. Walsh, gr. 9, Arithmetic and Music, 85 Eleventh.....	1,480

Janitors

John H. Nolan	65	Fulton
William J. Hunt, 2nd.....	3	Fourth

*WASHINGTON SCHOOL**Lang Street, near Inland*

John E. Barr, Master, Literature, 168 Sixth.....	\$2,820
Carrie L. Brown, gr. 4, 92 Jenness.....	1,480
Helen A. Dow, gr. 9, 8, 7, Algebra and Grammar, 149 B.....	1,480
Clara M. Everett, gr. 5, 4, 21 Davenport Terrace.....	1,480
Rose C. Geary, gr. 9, 8, 7, History, 49 Whipple.....	1,480
Laura F. Greene, gr. 9, 8, 7, Arithmetic and Music, 179 Warwick.....	1,480
Sara S. Griffin, gr. 6, 121 South Walker.....	1,480
Edith A. Howitt, gr. 9, 8, 7, Composition and Grammar, 169 Merrimack...	1,480
Gertrude T. Keyes, gr. 9, 8, 7, Geography, 62 Pine.....	1,480
Myrtle M. Killpartrick, gr. 4, Domestic Science, 27 Maryland Ave.....	1,580
Olive J. Palm, gr. 5, 806 Stevens	1,480
Esther A. Sanders, gr. 6, 79 Methuen	1,400

Janitors

David H. Angluin	27	Crowley
Thomas A. Green	512	Gorham
James A. Buckley	190	High

PRIMARY SCHOOLS

The grammar school to which each primary belongs is indicated in parenthesis.
 Alice T. Lee, Supervisor of Primary Grades, 12 So. Walker..... \$1,800
 Office Hours:—Mondays, Wednesdays and Fridays 3.45 to 4.45 p. m. at the
 office of the Superintendent of Schools.

AGAWAM STREET (Butler)

Mary A. Fay, Prin., gr. 3 and 2, 115 Stackpole..... \$1,530
 Anna M. Higgins, gr. 3, 2, 1, North Billerica..... 1,530

Janitor

John H. Hallett17 London

AMES STREET (Colburn)

Lawrence and Ames Street

Rose E. McVey, Prin., gr. 2, 46 Linden..... \$1,530
 Julia C. O'Sullivan, gr. 1, 105 Mt. Washington..... 1,480
 Mary C. Timmons, gr. 3, 22 Ash..... 1,480

Janitor

John T. McCarty17 Westwoods

BARTLETT

(In Bartlett School)

Grace C. Delaney, gr. 3, 4, 82 Colonial Ave..... \$1,480
 Regina B. Frappier, gr. 3, 26 Hampshire..... 1,320
 Emma M. Graham, gr. 2, 3, 419 Chelmsford..... 1,480
 Frances C. Moriarty, gr. 2, 418 Walker..... 1,480
 Essie E. Roche, gr. 1, 1835 Middlesex..... 1,480
 Mary E. Snow, gr. 1, 89 School..... 1,480

CABOT STREET (Green)

Mary T. Welley, Prin., gr. 3, 254 Parkview Ave..... \$1,530
 Loretta A. Hannafin, gr. 2, 15 Sargent..... 1,480
 Ellen F. Lynch, gr. 2, 104 School..... 1,480
 Mary J. Murphy, gr. 1, 34 Butterfield..... 1,480

Janitor

John E. Hart.....86 West

CARTER STREET (Butler)

Katherine F. Brady, Prin., gr. 1, 173 Chapel..... \$1,530
 Henrietta I. Grady, gr. 2, 39 Lundberg..... 1,480
 Henlen R. Halloran, gr. 3, 546 Merrimack..... 1,480

Janitor

Timothy Moynihan.....38 Whipple

CENTRAL STREET (Colburn)

Elizabeth G. Lawler, Prin., gr. 3, 2, 269 High..... \$1,530
 Helen A. Drury, gr. 1, 348 Wilder..... 1,480

Janitor

William P^d Black.....900 Central

CHARLES STREET (Edson)

Alice T. Owens, Prin., gr. 3, 4 Belmont.....	\$1,530
Margaret A. Harrahan, gr. 1, 114 Bellevue.....	1,480
Louse F. Mahoney, Sight-Saving Class, 550 Westford.....	1,000
Temporary Assignment—Grade 2.	

Janitor

James F. Leary.....	249 E. Merrimack
---------------------	------------------

COLBURN (Colburn)

Anna M. Courtney Prin., gr. 3, 445 Merrimack.....	\$1,530
Elizabeth R. Connell, gr. 1, 19 Fort Hill Ave.....	1,480
Mary A. Hartley, Special, 358 Walker.....	1,480
Gertrude B. McQuade, gr. 2, 225 Summer.....	1,480

Janitor

John Scott	732 Stevens
------------------	-------------

*CROSS STREET (Bartlett)**Cross Street, between Fletcher and Mt. Vernon Streets*

Ida J. Clarke, Prin., gr. 3, 96 Grove.....	\$1,530
Anna T. Coburn, gr. 2, 39 Arlington.....	1,480
Katherine E. Kelly, gr. 1, 100 Canton.....	1,480
Alice F. Seeton, gr. 1, 159 Mammoth Rd.....	1,480

Janitor

William H. Kennedy.....	73 Fletcher
-------------------------	-------------

*DOVER STREET (Morey)**Dover Street, between Middlesex and Grove Streets*

Clara B. Horne, Prin., gr. 3, 106 Chestnut.....	\$1,530
Clementine H. Bowers, gr. 2, 60 Loring.....	1,480
Bertha Gardner, gr. 1, 32 Robbins.....	1,480

Janitor

Frank J. Burch.....	24 So. Canton
---------------------	---------------

*ELIOT (Edson)**Favor and Summer Streets*

Ellen A. Stillings, Prin., gr. 1, 2, 24 Bellevue.....	\$1,530
Ellen A. Corbett, gr. 3, 32 Highland.....	1,480
Loyola McCann, gr. 1, 17 Wenworth Ave.....	1,480
Annie M. Robbins, gr. 2, 116 Highland Ave.....	1,480

Janitor

Charles J. McCabe.....	318 High
------------------------	----------

*FRANKLIN (Morey)**Branch and Middlesex Streets*

Kate G. Jones, Prin., gr. 1, 240 Jewett.....	\$1,530
Ethel H. Chalifoux, gr. 2, 157 Mt. Vernon.....	1,480
Mary E. Richardson, gr. 3, Chelmsford.....	1,480

Janitor

Joseph Provost.....	54 Queen
---------------------	----------

GRAND STREET (Lincoln)

Marion E. Greene, Prin., gr. 3, 405 Westford.....	\$1,530
Jennie M. Bennett, gr. 2, 38 Gates.....	1,480
*Mary J. Moynahan, gr. 1, 28 Windsor.....	1,480
*Room in Howard Street School.	

Janitor

Ernest McGowan91 West Third

GREENHALGE

(In Greenhalge School)

Ruth Crowell, gr. 1, 69 Fort Hill Ave.....	\$1,480
Mary G. Dudley, gr. 2, 126 Coburn.....	1,080
Blanche E. Marshall, gr. 1, 445 Merrimack.....	1,480
Martha Rogers, gr. 3, 131 Cumberland Road.....	1,480

KIRK STREET (Green)

Eliza A. Davis, Prin., gr. 3, 2, 1, 100 Canton.....	\$1,530
---	---------

Janitor

Patrick J. Clark199 Pleasant

LAKEVIEW AVENUE (Greenhalge)

Lakeview Avenue

Margaret J. McCluskey, Prin., gr. 3, 246 Methuen.....	\$1,530
Anna F. Joyce, gr. 1, 82 Eleventh.....	1,530
Katharine P. O'Brian, gr. 2, 28 West Adams.....	1,480

Janitor

Joseph F. Nephen39 West

LAURA LEE (Washington)

Plain and Powell Streets

Flora H. Sprague, Prin., gr. 3, 110 Branch.....	\$1,580
Sara M. Dean, gr. 1, 2, 14 Belmont.....	1,480
Lena M. Robinson, gr. 3, 2, 68 So. Walker.....	1,480
Elizabeth H. Seede, gr. 1, 24 Warwick.....	1,480
Lilla M. Stanley, gr. 2, 2 Horn.....	1,480

Janitor

William J. Hunt17 A

LEXINGTON AVENUE (Bartlett)

Carrie M. Hart, Prin., gr. 3, 4, 5, 80 Tyler Park.....	\$1,530
M. Grace McCue, gr. 1, 2, 536 Rogers.....	1,240

Janitor

Timothy F. Rohan65 Claire

LONDON STREET (Butler)

London and Autumn Streets

Elizabeth R. Maguire, Prin., gr. 3, 53 Nesmith.....	\$1,530
Margaret L. Hagerty, gr. 2, 1, 17 Bellevue.....	1,480
*Mary F. Hill, gr. 2, 1, Chelmsford, Mass.....	1,480

Janitor

Peter J. Hunt57 Greendale Ave.

* Room in W. London St. School.

*LYON STREET (Butler)**Lyon and Central Streets*

Kate F. Murphy, Prin., gr. 3 and 2, 870 Gorham.....	\$1,530
Katherine C. Early, gr. 1, 2, 23 Oak.....	1,480
Mary J. McCarry, gr. 1, 2, 1600 Gorham.....	1,480

Janitor

John J. Manchester.....	47 Hurd
-------------------------	---------

*MIDDLESEX VILLAGE (Morey)**Middlesex and Cornell Streets*

Harriet F. Wakefield, Prin., gr. 5, 6, 12 Warwick.....	\$1,530
Gertrude E. Dane, gr. 1 and 2, 222 Gibson.....	1,480
Mary J. Reardon, gr. 3 and 4, 16 Marginal.....	1,480

Janitor

P. Henry Driscoll.....	16 Edwards
------------------------	------------

*PAWTUCKET PRIMARY**(In Pawtucket School)*

Eugenia L. Hogan, gr. 3, 106 Avon.....	1,480
Maude M. Hardy, gr. 2, 236 Pawtucket.....	1,480
Mary E. Gordon, gr. 1, 61 Loring	1,000

*PINE STREET (Morey)**Pine and Gibson Streets*

Carrie J. Bailey, Prin., gr. 3, 56 Loring.....	\$1,530
Helen D. Swain gr. 1, 418 Walker.....	1,480
Grace I. Washburn, gr. 2, 390 Walker.....	1,480

Janitor

Joseph M. Hunt	169 Broadway
----------------------	--------------

*POND STREET (Moody)**Pond and High Streets, Belvidere*

Adelaide Crowley, Prin., gr. 1, 2, 115 Fort Hill Ave.....	\$1,530
*Maude E. Green, gr. 1, 238 E. Merrimack.....	1,480
Mary I. Halloran, gr. 2, 546 E. Merrimack.....	1,480
**Alice E. Ramsay, gr. 3, 21 Myrtle.....	1,480

*Room in High Street School.

**Room in Moody School.

Janitor

Timothy F. Harrington.....	156 Andover
----------------------------	-------------

*POWELL STREET (Morey)**Powell Street, near Liberty*

Viola A. Hamblett, Prin., gr. 1, 18 So. Walker.....	\$1,530
Ellen J. Piper, gr. 3, 2, 55 Norcross.....	1,480

Janitor

James A. Buckley.....	190 High
-----------------------	----------

*RIVERSIDE**(In Riverside School)*

Charlotte O. Lowe gr. 1, 2, No. Chelmsford.....	\$1,480
Etta M. Smith, gr. 2, 3, 1118 Lawrence.....	1,480

SYCAMORE STREET (Moody)

Florence E. Rowell, Prin., gr. 3, 2, 65 Huntington.....	1,530
Elizabeth B. Dame, gr. 2, 1, 3 Parkview Ave.....	1,480

Janitor

Dennis A. Harrington.....	495 High
---------------------------	----------

TENTH STREET (Varnum)
Cor. Tenth and Varnum Streets

Mary F. Beane, Prin., gr. 3, 212 Tenth.....	\$1,530
Alice M. French, 21 May	1,480
Alice A. Holtham, gr. 1, 1107 Bridge.....	1,480
Fannie H. Murphy, gr. 2, 42 Twelfth.....	1,480

Janitor

Winfield S. Cross.....	55 Seventh
------------------------	------------

WASHINGTON
(In Washington School)

Mary V. Coughlin, gr. 1, 15 Cross.....	\$1,240
Annie E. Irving, gr. 3, 2, 783 Lawrence.....	1,480
Alberta M. McQuesten, gr. 2, 1, 118 D.....	1,160

WEED STREET (Butler)

Lilla M. McEvoy, Prin., gr. 2, 3, 210 Pawtucket.....	1,530
Temporary Assignment Grade 1	

Janitor

John N. Palm.....	369 Lawrence
-------------------	--------------

*WEST SIXTH STREET (Varnum)**West Sixth Street, between Coburn and Jewett Streets*

Stella J. Allen, Prin., gr. 3, 115 Third.....	\$1,530
Elizabeth F. Lamere, gr. 2, 281 E. Merrimack.....	1,480
Mabel A. Metcalf, gr. 1, 93 Vernon.....	1,480
Laura H. Palmer, gr. 1, 78 Hildreth	1,480

Janitor

Adam McElroy	670 Bridge
--------------------	------------

*WORTHEN STREET (Green)**Worthen Street, between Market and Broadway*

Esther V. Green, Prin., gr. 2, 434 Westford.....	\$1,530
Mary R. Marren, gr. 3, 86 Rolfe.....	1,480
Mary E. Meehan, gr. 1, 228 Worthen.....	1,480

Janitor

Charles E. Clark	11 Carter
------------------------	-----------

KINDERGARTENS

AGAWAM STREET
(In Agawam Street Primary)

Sarah G. Sparks, Prin., 59 Elm.....	\$1,240
-------------------------------------	---------

*BARTLETT**(In Bartlett School)*

Helen W. Noyes, Prin., 192 Butman Rd.....	\$1,100
Evelyn L. Staples, 393 Wilder.....	1,120

CENTRAL STREET*(In Central Street Primary)*

Gladys T. Parsons, 158 Hale..... \$1,000

CHARLES STREET*(In Colburn Primary)*Mabel D. Nickerson, Prin., 125 Clark Road..... \$1,240
S. Alice Knapp, 305 E. Merrimack..... 1,180**DOVER STREET***(In Dover Street Primary)*

Elizabeth A. Wilson, Prin., 15 So. Canton..... \$1,240

FRANKLIN*(In Franklin Primary)*N. Grace Taylor, Prin., 11 Ware \$1,240
Dorothy Farnsworth, 67 Bellevue..... 1,000**HOWARD STREET***(In Howard Street Primary)*Gertrude A. Roberts, Prin., Chelmsford, Mass., P. O. Box No. 61..... \$1,240
Theresa L. White, 158 Dartmouth 1,000**LAKEVIEW AVENUE***(In Lakeview Avenue Primary)*Celina L. Lalime, Prin., 28 Flemings..... \$1,240
Anna M. Ford, 260 High 1,000**LAURA LEE***(In Laura Lee Primary)*Katharine M. Crowley, Prin., 115 Fort Hill Ave..... \$1,240
Doris Childs, 256 Gibson 1,120**MOODY***(In High Street Primary)*

Marietta King, Prin., 205 Stackpole..... \$1,240

PAWTUCKET*(Mammoth Road)*Hortense Tabor, Prin., 82 Riverside..... \$1,240
Helen L. Eveleth, Thorndike 1,000**Janitor**

Thomas J. McGee 83 White

PINE STREET*(In Pine Street Primary)*Louie I. Smith Prin., 549 Westford..... \$1,240
Hortense M. Lamere, 13 Ralph..... 1,050**VARNUM***(In Varnum School)*Ella M. Penn, Prin., 31 Sanders Ave..... \$1,240
Marion Simpson, 67 Methuen 1,180

WEED STREET
(*In Weed Street Primary*)

Gertrude B. Crowley, Prin., 115 Fort Hill Ave..... \$1,240

CONTINUATION SCHOOL

HIGH SCHOOL ANNEX

Thomas A. Ginty, Director, 117 Andover.....	\$2,820
Mary E. King, Clerk, 22 Walnut.....	1,000
James J. Clinton, Academic Subjects, 203 Salem.....	1,800
Eugene J. Donovan, Academic Subjects, 809 Lawrence.....	1,800
Julia M. Driscoll, Academic Subjects, 47 Grace.....	1,680
Charles D. Foley, Academic Subjects, 14 Ellsworth.....	1,800
Charles W. Frost, Instructor in Woodworking Department, 635 Westford	1,800
M. Katherine Gallagher, Domestic Science, 300 Wilder.....	1,680
William G. Hannafin, Instructor Machine Shop Practice, 15 Sargent.....	1,800
Margaret A. Harrington, Teacher of Dressmaking and Millinery, 211	
Christian	1,600
Anna T. McCarron, Academic Subjects, 228 High.....	1,680
Katherine C. O'Neill, Academic Subjects, 175 Walker.....	1,680
William J. A. Reardon, Academic Subjects, 16 Marginal.....	1,800
Elizabeth J. Regan, Teacher of Dressmaking, 282 Concord.....	1,680
Raymond W. Slater, Instructor in Woodworking Department, 1939 Mid-	
dlexex	1,800
Major Colby T. Kttredge, Physical Director, 48 So. Walker.....	500

VOCATIONAL SCHOOL

MANN SCHOOL BUILDING, BROADWAY

Thomas F. Fisher, Director, 121 Livingston Ave.....	\$2,900
Clerk	
Margaret E. McCann, 196 Aiken Ave.....	1,000
Sub-Master and Head of Machine Department	
Maurice A. Butterfield, 12 June	2,300
Instructor of Auto-Repairing	
George H. Dozois, 11 Spaulding	1,900
Teacher of Mechanical Drawing	
James T. Gearon, Y. M. C. A.	1,700
Head of Auto Department	
John J. Gildee, 112 D	2,000
Teacher of Academics	
John H. Gillick, 18 Fred.....	2,000
Teacher of Shop Science	
William B. Hilliard, 38 So. Loring.....	1,700
Head of Electrical Department	
Chester W. McDonald, 22 Bellevue	2,100
Instructor of Mechanical Drawing and Academics	
Andrew J. Moynahan (Temp.), 19 Hampshire.....	1,700
Electrical Instructor	
Ernest A. Shafter, 373 Beacon	1,800
Electrical Instructor	
Harry M. Tabor (Temp.), 251 E. Merrimack.....	1,800
Instructor of Machine Shop Practice	
Charles J. Welsh, 77 Billings	1,900
Head of Woodworking Department	
Fred F. Wiggin, Chelmsford, Mass.....	2,000
Janitor	
George P. Daley.....	98 Walker

Oiler

Thomas F. Crowley, 79 West Fourth.....	1,550
--	-------

GIRLS' DEPARTMENT*Morrill School Building*

Tel. 5411

Esther M. Downing, Department Head, 434 Westford.....	\$1,800
---	---------

Head of Cooking Department

Ruberta M. Bramhall, 84 Tenth	1,540
-------------------------------------	-------

Teacher of Sewing

Agnes R. Burns, 220 West Sixth.....	1,300
-------------------------------------	-------

Teacher of Academics

Flora Common, 109 Beech	1,100
-------------------------------	-------

Teacher of Millinery

Mary H. Mehan, Bridmar Chambers, Fletcher St.....	1,360
---	-------

Head of Dressmaking Department

Anna M. O'Day, 599 Central.....	1,420
---------------------------------	-------

Teacher of Cooking

Edna J. Rundquist (Temp.), 16 Belmont.....	1,100
--	-------

Janitor

Theodore Towner	13 Third
-----------------------	----------

SPECIAL TEACHERS*Musical Director*

Frederick O. Blunt, 392 Chelmsford.....	\$2,500
---	---------

Assistants in Music

Jessie M. Hagar, 418 Walker.....	1,800
----------------------------------	-------

Gertrude F. O'Brien, 91 Riverside.....	1,550
--	-------

Supervisors of Drawing

Helene R. Abels, 43 Nicollet	1,550
------------------------------------	-------

Addie E. Edwards, 32 Majestic Chambers.....	1,550
---	-------

Teachers of Sewing

Ida J. Flint, Teaching of Sewing, 200 Liberty.....	1,640
--	-------

Louise H. McOsler, 209 Stackpole	1,240
--	-------

Esther M. Owens, 4 Belmont.....	1,460
---------------------------------	-------

Grace E. Stevens, Chelmsford, Mass., P. O. Box No. 85.....	1,400
--	-------

Manual Training

Ralph A. Luce, Chelmsford Mass., R. F. D. No. 1.....	2,000
--	-------

Arthur Lundwall, 619 Stevens	1,800
------------------------------------	-------

Physical Director in Elementary Schools

Major Walter R. Jeyes, 67 Gates	1,400
---------------------------------------	-------

Assistant to Physical Director

Nellie D. Horner, 353 Westford	1,300
--------------------------------------	-------

Supervisors of Penmanship

Fred Albinsin, 8 Newbury	500
--------------------------------	-----

Margaret M. Garvey, 144 Cumberland Rd.....	1,000
--	-------

Albert D. Mack, 20 Wentworth Ave.....	500
---------------------------------------	-----

James A. Shanley, 364 Lawrence	500
--------------------------------------	-----

Dental Clinic (In Worthen Street School)

Dr. E. A. Kent, 11 Harris Ave.....	1,000
<i>Assistant to Dentist</i>	
Eva M. Lantagne, 14 Albion	600

SCHOOL PHYSICIANS*Giving Names of Schools Supervised*

C. Stoyke Baker, M. D., 77 Mansur.....	\$ 500
Bartlett, Dover St. and Middlesex Village	
John F. Boyle, M. D., 32 Whipple.....	400
Butler, Lyon St., Carter St., Weed St., London St. and Central St.	
James J. Cassidy, M. D., 111 Riverside	400
Green, Worthen St., Kirk St., Cabot St., Franklin, Cross St., Vocational—Girls' Department	
Winifred M. Wools-Devine, M. D., 27 Parkview Ave.....	400
Pawtucket, Geenhalge and Lexington Ave.	
George O. Lavalley, M. D., 790 Merrimack.....	400
Varnum, West Sixth St., Tenth St. and Lakeview Ave.	
Charles M. Roughan, M. D., 105 Merrill Ave.....	400
Moody, Riverside, Pond St., Agawam St., Sycamore St and Vocational—Boys' Department	
Emma Y. Slaughter, M. D., 545 School.....	400
Colburn Gr., Colburn Pri., Edson, Charles St. and Ames St.	
Forster H. Smith, M. D., West Meadow Road.....	400
Lincoln, Laura Lee, Grand St., Eliot, Howard St. and Powell St.	
Edward O. Tabor, M. D., 131 Methuen	400
Morey, Washington and Pine St.	

SCHOOL NURSES

Marietta M. Dwyer, 23 Sidney.....	1,200
Mary Etta Frazier, 54 Starbird	1,200
Rose Lettrell, 13 Harrison	1,200
Anna J. O'Dwyer, 148 Midland	1,200

ABSENT ON LEAVE

Queenie A. Manchester, High School.	Mary E. Quirbach, High School
-------------------------------------	-------------------------------

PERMANENT SUBSTITUTES

Alice K. Dinneen, 25 Oliver	Catherine G. Boddy, 51 Starbird
Natalie H. McQuade, 102 Cross	Mary R. Maguire, 62 Gerrish Ave., Dracut
Loretta V. Gardner, 17 Waterford	Marion E. McMaster, 56 Rolfe
Teresa G. Lew, 89 Mt. Hope	Ethel D. Gordon, 61 Loring
Hazel Stevens, High St., Chelmsford	Helen A. Castles, 154 Avon
Helen M. Crowley, 254 Parkview Ave.	Margaret G. Condon, 81 Mt. Vernon
Mildred M. Clevette, 225 Summer	Henrietta G. Condon, 96 Midland
Alice B. Ingham, 62 Robbins	Georgianna P. Keith, 70 Third
Helen C. O'Hare, 203 Pleasant	Jessie M. Agnew, West Chelmsford
V. May Carlson, 105 Hoyt Ave.	Irene H. Dowd, 1354 Gorham
M. Alice Murphy, 74 Harris Ave.	Alice M. McDermott, 12 Courtland
Kathryn H. Flahavan, 27 Maple Ave.	Agnes A. McGowan, 36 Varney

UNASSIGNED JANITORS

Patrick H. Kelley	31	Claire
George McWilliams	47	Agawam

EVENING SCHOOLS

EVENING HIGH SCHOOL

Henry H. Harris, Principal.....	93	Eleventh
E. Helena Rivet, Principal's Assistant.....	271	Beacon
Orton E. Beach	858	Chelmsford
<i>Stenography III and Speed</i>		
Albertine Bernier	91	West Sixth
<i>Stenography II</i>		
Elmer G. Brennon.....	97	Georgia Ave.
<i>Commercial Arithmetic, Algebra and Geometry</i>		
M. Mabel Cassidy	44	B
<i>Spelling, Ancient and American History</i>		
Josephine A. Charbonneau	218	Riverside
<i>Stenography I</i>		
Alice L. Cluin	130	Fort Hill Ave.
<i>Elementary English</i>		
James F. Conway	113	Wentworth Ave.
<i>Physics and Chemistry</i>		
Grace D. Donovan	256	Branch
<i>Advanced English and Advanced Spelling</i>		
Ruth L. Eaton	59	Pine
<i>Typewriting</i>		
Mary A. Egan	29	Cady
<i>Stenography I</i>		
Margaret Garvey	144	Cumberland Road
<i>Penmanship</i>		
Frank C. Gilbert	119	Stevens
<i>Bookkeeping I</i>		
Peter J. Gulesian		Blanchard Ave., Billerica
<i>Manual Training and Mechanical Drawing</i>		
Elizabeth Irish	11	Willow
<i>Latin and Literature</i>		
Raymond J. Kenney	1	West View
<i>Stenography I</i>		
Charles A. King	4	Astor
<i>Bookkeeping II</i>		
Sara Laporte	76	June
<i>French</i>		
Albert D. Mack	20	Wentworth Ave.
<i>Head of Commercial Department—Bookkeeping III</i>		
John D. McKinley	474	Beacon
<i>Civil Service</i>		
Loretto A. McManmon	57	Second Ave.
<i>Commercial Geography, Advanced Grammar and Civil Government</i>		
Addie B. Merrill	465	Bridge
<i>Elementary Arithmetic</i>		
Ruth F. Murphy	56	Arlington
<i>Stenography I</i>		
Adelaide E. Noyes	245	Foster
<i>Elocution</i>		
Frances O'Neil	12	Osgood

Flora A. Owen	<i>Elementary Arithmetic</i>.....42	Huntington
Lewis A. Putnam	<i>Typewriting</i>.....19	Eighth Ave.
Joseph G. Pyne	<i>Stenography III</i>.....116	School
Charles J. Rodgers	<i>Advanced Arithmetic and Greek</i>.....164	Pine
Ruth L. Sawyer	<i>Manual Training</i>.....169	Fairmount
Charles E. Seede	<i>Commercial Arithmetic, Algebra and Advanced Grammar</i>.....476	Merrimack
Margaret L. Seeton	<i>Manual Training</i>.....12	Third Ave.
James A. Shanley	<i>Stenography II</i>.....364	Lawrence
M. Beatrice Shea	<i>Bookkeeping I</i>.....267	Walker
Alice O. Stickney	<i>Penmanship</i>.....599	School
Morton A. Sturtevant	<i>Rhetoric and Graduation English</i>.....50	Rea
Sarah Taff	<i>Business Correspondence and Spelling</i>.....235	Stackpole
Edward J. Thompson	<i>Penmanship</i>.....Chelmsford Centre	
Mary E. Tobin	<i>Physiology, Spanish and Advanced Arithmetic</i>.....52	Highland
	<i>Elementary English</i>	

ELEMENTARY EVENING SCHOOLS

COLBURN

Helen M. Shean, Principal.....	260	High
Mary M. Cowell	22	London
Margaret C. Fox	8	Eddy
Gertrude A. Hession	178	Perry
Leona M. Small	46	Whitney Ave.
Bride T. Sweeney	138	Pleasant

EDSON

D. Murray Cummings, Principal.....	64	Temple
Hazel Gardner	15	Columbus Ave
Marietta G. Gormley	22	Lyon
Henrietta I. Grady	39	Lundberg
Mary E. Lane	12	Ellsworth
Delia C. Maloney	70	Elm
Sadie E. Tully	111	Westford

GREEN

John E. Barr, Principal.....	168	Sixth
Hannah M. Barrows	66	Hanks
Mary V. Coughlin	15	Cross
Anna M. Courtney	445	Merrimack
Esther G. Donlin.....	756	Westford
Agnes T. Fay	123	Third

Mary A. Fay	123	Third
Mae A. Hogan	399	Walker
Elizabeth G. Lawler.....	260	High
Mary R. Marren	86	Rolfe
Alice A. Masterson	14	Oakland
Elizabeth Provencher	22	West Bowers
Julia B. Riordan	27	Woodward Ave.

ROOMS IN CABOT STREET SCHOOL
(For Girls Only)

Charlotte O. Lowe	2010	Middlesex
Ellen F. Lynch	104	School

GREENHALGE

William W. Dennett, Principal.....	400	Stevens
Catherine T. Gillick	998	Lakeview Ave.
Annie M. Robbins	116	Highland Ave.
Martha Rogers	131	Cumberland Road

EVENING VOCATIONAL SCHOOL

MEN'S DEPT.

Thomas A. Fisher, Director.....	121	Livingston Ave.
Margaret E. McCann, Clerk.....	196	Aiken Ave.

Automobile Department

George H. Dozois	11	Spaulding
John J. Gildee	112	D

Carpentry Department

John Briscoe	Dracut, Mass.
Fred F. Wiggin	Chelmsford, Mass.

Electrical Department

Chester W. McDonald	22	Bellevue
---------------------------	----	----------

Engineering

Edwin C. Wells	Dracut, Mass.
----------------------	---------------

Fireman

Daniel C. Callahan	22	Second Ave.
--------------------------	----	-------------

Machine Department

Maurice A. Butterfield, Dept. Head.....	12	June
Eddie Bean	1209	Middlesex
Michael Donahue.....	381	Dutton
Richard Frederick	1079	Middlesex
William B. Hilliard	38	South Loring
Charles J. Welsh.....	77	Billings
Guy Whitney	132	B

Plumbing

John H. McGuinness	682	Broadway
--------------------------	-----	----------

GIRLS DEPT.

Practical Arts

Esther M. Downing, Dept. Head.....	434	Westford
Gabrielle Paquin, Clerk	161	Avon

Cooking Department

Ruberta Bramhall, Dept. Head.....	84	Tenth
Anna T. Coburn	39	Arlington
Mary Conroy	94	Andrews
Anna Dennett.....	400	Stevens
Helen Graves	270	Varnum Ave.
Katherine Humphrey	165	Humphrey

Helen King	64	Hanks
Katherine King	4	Astor
Mabel Metcalf	93	Vernon
Modwena Rowlandson	136	Parkview Ave.
Edna J. Rundquist	16	Belmont

Dressmaking Department

Anna M. O'Day, Dept. Head.....	599	Central
Caro Allan	476	Varnum Ave.
Della Barnes	1083	Gorham
Annie Boyle	32	Whipple
Mary V. Bradley	903	Gorham
Agnes R. Buras	220	West Sixth
Katherine Burns.....	97	Andrews
Carrie Cardell	48	South Loring
Mary E. Durant	209	Summer
Nora Early	256	E. Merrimack
Madeline Hartigan	137	Moore
Eleanor Kivlan	73	Moore
Katherine McDonald	5	Varney
Margaret McGurn	110	South Walker
Minnie Moran	43	Fifth
Orina B. Mongrain	1050	Bridge
Mary F. Rourke	22	Abbott
Nellie Rourke	33	Marion
Helen Rouse	201	Summer
Elzina Secord	455	Stevens
Marguerite M. Turgeon	282	Westford
Rose Ward	635	Broadway
Helen Zollinger	19	Maryland Ave.

Millinery

Mary H. Mehan, Dept. Head.....	Bridmar Chambers, Fletcher St.
Cordelia Barrows	19 Newhall
Hilda Benoit	152 Jewett
Evangeline Bertrand	Dracut, Mass.
Mary Devine	231 School
Ella Donohue	23 Huntington
Evelyn Hebert	18 Third
Lena Gendron	17 Burns
Katherine Keyes	62 Pine
Mae Kelly	101 Pleasant
Lena Lowrey	43 Jewett
Arthemise Hotin.....	709 Merrimack
Agnes Weston	137 Stackpole

Home Nursing

Marietta Dwyer	23 Sidney
----------------------	-----------

SALARY SCHEDULE

In Effect From January 1, 1921
High School

Head Master	\$4,300
Sub-Masters	3,400
Junior Masters	3,000
Junior Sub-Masters	2,700
Men Teachers	\$1,700 to \$2,500

First year, \$1,7000; second year, \$1,830; third year, \$1,960; fourth year, \$2,090; fifth year, \$2,220; sixth year, \$2,350; seventh year, \$2,500; department head, \$100 in excess of schedule salary.

Women Teachers \$1,400 to \$2,000.
 First year, \$1,400; second year, \$1,500; third year, \$1,600; fourth year, \$1,700;
 fifth year, \$1,800; sixth year, \$1,900; seventh year, \$2,000; department head, \$100
 in excess of schedule salary.

Elementary Schools

Masters (Maximum reached in seventh year)..... \$1,920 to \$3,100
 Teachers 1,200 to 1,700
 First year, \$1,200; second year, \$1,280; third year, \$1,360; fourth year,
 \$1,440; fifth year, \$1,520; sixth year, \$1,600; seventh year, \$1,700.

Principals of Primary Schools

Primary Principals \$50 above schedule.
 Principal of Laura Lee School \$100 above schedule.
 Supervisor of Primary grades, \$2,100.

Kindergartens

Principals \$1,500
 Assistants 1,200 to 1,440
 First year, \$1,200; second year, \$1,280; third year, \$1,360; fourth year, \$1,440.

Temporary Teachers

Men, per day \$6.00
 Women, per day 6.00
 Kindergartens, per day 3.00

Special Teachers

Drawing \$1,550
 Music 1,550 to 2,500
 Sewing 1,240 to 1,640

Instructors in Open Air and Sight Saving Classes to receive \$150 above
 schedule.

Instructors in Domestic Science in Elementary Schools to receive \$100 above
 schedule.

The salary of the Director of the Vocational School to be \$3300.

The salary of Margaret McCann, clerk in the Vocational School to be at the
 rate of \$1200 per year.

Vocational School

Women Teachers \$1,200 to \$1,800
 First year, \$1,200; second year, \$1,300; third year, \$1,400; fourth year,
 \$1,500; fifth year, \$1,600; sixth year, \$1,700; seventh year, \$1,800. Those in Su-
 pervisory positions to receive \$100 above schedule.

Continuation School

Director \$3,100
 Clerk 1,000 to 1,200
 First year, \$1,000; second year, \$1,100; third year, \$1,200.

Men Teachers \$1,600 to \$2,200
 First year, \$1,600; second year, \$1,700; third year, 1,800; fourth year,
 \$1,900; fifth year, \$2,000; sixth year, \$2,100; seventh year, \$2,200.

Women Teachers \$1,300 to \$1,850
 First year, \$1,300; second year, \$1,400; third year, \$1,500; fourth year, \$1,600;
 fifth year, \$1,700; sixth year, \$1,800; seventh year, \$1,850.

Instructors in Manual Training

First year, \$1,800; second year, \$1,900; third year, \$2,000; fourth year, \$2,100;
 fifth year, \$2,200.

Part time supervisors in Penmanship in Elementary Schools to receive \$500⁰⁰ per year.

Full time supervisors in Penmanship in Elementary Schools to receive \$200 above schedule.

Pay of permanent substitutes in Elementary Schools and temporary teachers in the High, Vocational and Continuation Schools to be at the rate of \$6.00 per day.

TEACHERS' CERTIFICATES

Granted Since January 1, 1920

First Grade

Eugene J. Donovan, Holy Cross, 1915	Lowell, Mass.
Joseph A. McAvinnue, Boston College, 1919	Lowell, Mass.

Second Grade

Mildred Beals, Smith College, 1919	Lowell, Mass.
Mary E. Harrigan, St. Elizabeth's, 1919	Lowell, Mass.
Anne V. Reynolds, St. Elizabeth's, 1919	Lowell, Mass.

Third Grade

Mary V. Coughlin	Framingham Normal
Katherine L. Farley	Lowell Normal
Margaret M. Garvey	Lowell Normal
Theresa R. Glynn	Lowell Normal
Margaret C. Gookin	Lowell Normal
Mary E. Gordon	Lowell Normal
M. Grace McCue	Lowell Normal
Mary A. McKeon	Lowell Normal
Katherine M. O'Donnell	Lowell Normal
Mary T. O'Neill	Lowell Normal

Fourth Grade

Dorothy Farnsworth, Perry Kindergarten, 1920	Lowell, Mass.
--	---------------

Authorized Text Books
For
High and Elementary Schools

Adopted by the School Committee of
Lowell, Massachusetts, June, 1913

HIGH SCHOOL

ENGLISH

Adopted

Rhetoric	Brooks & Hubbard	American Book Co.
Enlarged Practice Book	Hitchcock	Henry Holt & Co.
The Odyssey	Church	The Macmillan Co.
Buehler	Gray	American Book Co.
Tales from Shakespeare	Lamb	Ginn & Co.
Last of the Mohicans	Cooper	D. C. Heath & Co.
House of Seven Gables	Hawthorne	Houghton, Mifflin Co.
Twice Told Tales	Hawthorne	Houghton Mifflin Co.
Illiad	Pope	Sibley & Ducker
Illiad	Bryant	Houghton, Mifflin Co.
Silas Marner	Eliot	Ginn & Co.
Julius Caesar	Shakespeare	D. C. Heath & Co.
Merchant of Venice	Shakespeare	Leach, Shewell & Sanborn
Macbeth	Shakespeare	Ginn & Co.
Lady of the Lake	Scott	American Book Co.
Ivanhoe	Scott	American Book Co.
Life of Johnson	Macaulay	Ginn & Co.
Sir Roger De Coverley	Addison & Steele	American Book Co.
L'Allegro and Il Penseroso	Milton	Ginn & Co.
Speech on Conciliation with America	Burke	Houghton, Mifflin Co.
Idylls of the King	Tennyson	Ginn & Co.
Vision of Sir Launfal	Lowell	Houghton, Mifflin Co.
Ancient Mariner	Coleridge	The Macmillan Co.
Chaucer to Arnold	George	The Macmillan Co.
Essays of Elia	Lamb	Houghton Mifflin Co.
Tales of a Wayside Inn	Longfellow	Houghton Mifflin Co.
Grandmother's Story	Holmes	Houghton Mifflin Co.

Supplementary

Rhetoric	Shackford-Judson	Sanborn & Co.
Handbook of Composition	Woolley	D. C. Heath & Co.
Exercises in English	Strang	D. C. Heath & Co.
Students' Hist. of Eng. Literature	Simonds	Houghton, Mifflin Co.
Introduction to Eng. Literature	Pancoast	Henry Holt & Co.
Self-Cultivation in English	Palmer	Houghton, Mifflin Co.
Life of Goldsmith	Irving	Ginn & Co.
Tales of a Traveler	Irving	Longmans, Green & Co.
Palamon and Arcite	Dryden	Leach, Shewell & Sanborn
Schrab and Rustum	Arnold	Henry Holt & Co.
Prologue to the Canterbury Tales	Chancer	Houghton, Mifflin Co.
Essays on Clive and Hastings	Macaulay	Ginn & Co.
Washington's Farewell Address	Foster	Houghton, Mifflin Co.
Autobiography of Benj. Franklin		American Book Co.
Selected Essays	Emerson	American Book Co.
She Stoops to Conquer	Goldsmith	Houghton, Mifflin Co.
Twelfth Night	Shakespeare	Houghton, Mifflin Co.
King Lear	Shakespeare	D. C. Heath & Co.

Coriolanus
Henry Fifth
Midsummer Night's Dream
New Practice Book
High School English
Business English
Rhetoric
Selections from Lincoln
Life of Johnson

Pilgrim's Progress
Birds & Bees
Tale of Two Cities
American Poems
Vicar of Wakefield

Sketch Book
Selected Ballads and Lyrics
Leaflets
Old Testament Narratives
Odyssey
Poems and Tales
Marmion
Kenilworth
Woodstock
Guy Mannering
As You Like It
Othello
Tempest
Treasure Island
Princess
Essay on Burns
History of the Plague
Paradise Lost
Golden Treasury
Life of Nelson
Forum of Democracy
Short Stories
Short Stories
Flight of a Tartar Tribe

French Dictionary
French Grammar
French Reader
French Composition
French Syntax and Composition
Contes et Legendes
Sight Reading

La Chute
French Lyrics
Exercises for Composition
Scenes de la Revolution Francaise
Fables
Douze Contes Nouveaux
French Grammar

Shakespeare
Shakespeare
Shakespeare
Hitchcock
Brubacher & Snyder
Davis & Lingham
Scott & Denny
Beave
Boswell

Bunyan
Burroughs
Dickens
Gaston
Goldsmith

Irving
Lodge
Lowell
Nettleton
Palmer
Poe
Scott
Scott
Scott
Scott
Shakespeare
Shakespeare
Shakespeare
Stevenson
Tennyson
Carlyle
Defoe
Milton
Palgrave
Southey
Watkins
Moulton
Hart & Perry
DeQuincey

FRENCH

Adopted

Fraser & Squair
Super
Grandgent
Bouvet
Guerber
Rogers

Supplementary

Hugo
Bowen
Grandgent & Kimball
Lamartine
La Fontaine
Fontaine
Worman

Ginn & Co.
Houghton, Mifflin Co.
D. C. Heath & Co.
Henry Holt & Co.
Chas. E. Merrill Co.
Ginn & Co.
Allyn & Bacon
Chas. E. Merrill Co.
D. C. Heath & Co.
Ginn & Co.
American Book Co.
Houghton, Mifflin Co.
D. C. Heath & Co.
Chas. E. Merrill Co.
American Book Co.
Allyn & Bacon
Houghton, Mifflin Co.
Houghton, Mifflin Co.
Henry Holt & Co.
Houghton, Mifflin Co.
Houghton, Mifflin Co.
American Book Co.
A. L. Burt
Houghton, Mifflin & Co.
Ginn & Co.
Houghton, Mifflin & Co.
American Book Co.
Houghton, Mifflin & Co.
D. C. Heath & Co.
B. H. Sanborn & Co.
B. H. Sanborn & Co.
Longmans, Green & Co.
B. H. Sanborn & Co.
Ginn & Co.
Longmans, Green & Co.
Allyn & Bacon
MacMillan & Co.
Houghton, Mifflin & Co.
B. H. Sanborn & Co.

D. C. Heath & Co.
D. C. Heath & Co.
D. C. Heath & Co.
D. C. Heath & Co.
D. C. Heath & Co.
American Book Co.
American Book Co.

D. C. Heath & Co.
D. C. Heath & Co.
D. C. Heath & Co.
American Book Co.
American Book Co.
American Book Co.
American Book Co.

La Tache Du Petit Pierre	Mairet	American Book Co.
Selected Stories	Daudet	American Book Co.
Mademoiselle de la Seigliere	Sandeau	American Book Co.
Readings from French History	Super	Allyn & Bacon
French Composition	Blouet	Schoenhof
Grammaire Francaise	Larive et Fleury	Schoenhof
French Reader	Kuhns	Henry Holt & Co.
Le Dix-Septieme Siecle	Duval & Williams	Henry Holt & Co.
Simple French	Francois & Giroux	Henry Holt & Co.
La Grammaire	Labiche	Ginn & Co.
Intermediate French	Jacques	Ginn & Co.
Colomba	Merimee	Ginn & Co.
Le Voyage de Monsieur Perrichon	Labiche et Martin	Ginn & Co.
Complete Course		
French Grammar Shorter Course	Fraser & Squair	D. C. Heath & Co.
Le Tour de la France par Deux Enfants	Bruno	American Book Co.
Contes et Legendes, H	Guerber	American Book Co.
Commercial French Reader		Pitman
Drames et Comedies		American Book Co.
Le Premier Livre	Meras	American Book Co.
La Belle France	Monvert	Allyn & Bacon
Les Oberle	Bazin	Henry Holt & Co.
Historical French Reader		American Book Co.
French Newspaper Reader		American Book Co.
La Poudre aux Yeux	Labiche & Martin	American Book Co.
Contes Choisis	Bazin	D. C. Heath & Co.
La France qui Travaille		D. C. Heath & Co.

GERMAN

Adopted

German Dictionary	Heath	D C. Heath & Co.
Prose Composition	Harris	D C. Heath & Co.
German Lessons	Harris	D C. Heath & Co.
German Composition	Wesselhoeft	D C. Heath & Co.
Wilhelm Tell	Schiller	D C. Heath & Co.
Immensee	Storm	D C. Heath & Co.

Supplementary

Words of Frequent Occurrence	Bierwirth	Henry Holt & Co.
Zerbrochener Krug	Zschokke	D. C. Heath & Co.
Composition	Fasnacht	The Macmillan Co.
Der Neffe als Onkel	Schiller	D. C. Heath & Co.
L'Arrabbiata	Heyse	American Book Co.
Zwischen Himmel und Erde	Ludwig	D. C. Heath & Co.
Das Edle Blut	Wildenbruch	Henry Holt & Co.
Der Schwiegersohn	Baumbach	Henry Holt & Co.
Der Stumme Ratsherr	Richl	D. C. Heath & Co.
Composition	Pope	Henry Holt & Co.
Das Spiehnannskind	Richl	D. C. Heath & Co.

MATHEMATICS

Adopted

Plane Geometry	Wentworth & Smith	Ginn & Co.
Secondary Algebra	Wells	D. C. Heath & Co.
Essentials of Algebra	Wells	D. C. Heath & Co.
Elementary Algebra	Wentworth	Ginn & Co.
Trigonometry	Wentworth	Ginn & Co.
Elementary Algebra	Wells	
Plane Geometry	Wentworth & Smith	Ginn & Co.
Solid Geometry	Wentworth & Smith	Ginn & Co.
Plane Trigonometry	Wentworth	Ginn & Co.

Plane Geometry
 McCurdy Exercises
 Essentials of Plane Geometry
 Essentials of Solid Geometry
 First Course of Algebra
 Exercises in Algebra
 Review of Algebra
 Algebra Exercises
 Plane Geometry (Reviews)
 Exercises in Alg. & Geom.

First Greek Book
 Xenophon's Anabasis
 Greek Grammar
 Greek-English Lexicon
 Odyssey, Books I-VI
 Greek Prose Composition

Xenophon's Hellenica. 1-IV
 Iliad, Books I-VI
 Herodotus, Vol. II

Latin Grammar
 Cicero
 Virgil
 Latin Prose Composition
 New Method for Caesar

Cicero Texts
 Virgil Texts
 Caesar Texts
 Sallust Texts
 First Book in Latin
 Caesar
 Ovid
 Nepos
 Latin Composition
 A Year in Latin

Modern Illustrative Bookkeeping
 Seventy Lessons in Spelling
 Modern Business Penmanship
 Commercial Law
 Commercial Arithmetic
 Mental Arithmetic
 Mental Arithmetic
 Commercial Geography
 Gregg Shorthand
 Rational Typewriting

Supplementary

Schultz & Sevenoak	The Macmillan Co.
McCurdy	D. C. Heath & Co.
Wells	D. C. Heath & Co.
Wells	D. C. Heath & Co.
Wells	D. C. Heath & Co.
McCurdy	
Rivenburg	
Robbins	
MacGibbon	Sibley
Hale	Heath

GREEK

Adopted

White	Ginn & Co.
Goodwin & White	Ginn & Co.
Goodwin	Ginn & Co.
Liddell & Scott	American Book Co.
Perrin & Seymour	Ginn & Co.
Pearson	American Book Co.

Supplementary

Manatt	Ginn & Co.
Seymour	Ginn & Co.
Dietsch	Teubner Edition, Leipsic, Germany

LATIN

Adopted

Allen & Greenough	Ginn & Co.
Allen & Greenough	Ginn & Co.
Allen & Kittredge	Ginn & Co.
Daniell-Brown	B. H. Sanborn & Co.
Potter	B. H. Sanborn & Co.

Supplementary

	American Book Co.
	American Book Co.
	American Book Co.
	American Book Co.
Inglis & Prettyman	The Macmillan Co.
Allen & Greenough	Ginn & Co.
Allen & Greenough	Ginn & Co.
Barss	MacMillan Co.
Baker & Inglis	American Book Co.
W. A. Montgomery	Row, Peterson & Co.

COMMERCIAL

Adopted

Williams & Rogers	American Book Co.
Williams & Rogers	American Book Co.
Mills	American Book Co.
Gano	American Book Co.
Moore	American Book Co.
Thurston	American Book Co.
Thompson	American Book Co.
Adams	D. Appleton Co.
	Gregg Publishing Co.
	Gregg Publishing Co.

Supplementary

Com. and Industrial Geography Keller & Bishop
Words
Zaner Method Manual
Speed Studies
Graded Readings in Gregg Shorthand
Progressive Exercises
Practical Drills in Shorthand Penmanship
Advanced Practice in Gregg Shorthand

Ginn & Co.
Gregg Pub. Co.
Zaner & Bloser Co.
Gregg Pub. Co.
Gregg Pub. Co.
Gregg Pub. Co.
Gregg Pub. Co.
Gregg Pub. Co.

SPANISH

Worman's First Spanish Book
Worman's Second Spanish Book
Elementary Spanish Grammar
Lecturas Faciles
Poco a Poco
Spanish Tales for Beginners
Cuentos Modernos
Spanish Dictionary

Espinosa & Allen
Wilkins
Hall
Hills
Johnson
Appleton

American Book Co.
American Book Co.
American Book Co.
Silver, Burdett & Co.
World Book Co.
Henry Holt Co.
American Book Co.
Appleton Pub. Co.

*HISTORY**Adopted*

History of the United States
Brief History of the United States
Short History of Ancient Times
History of the Ancient World
Roman History
Leading Facts of English History
Ireland's Story

Fiske
McMaster
Myers
Botsford
Morey
Montgomery
Johnston & Spencer

Houghton, Mifflin Co.
American Book Co.
Ginn & Co.
The Macmillan Co.
American Book Co.
Ginn & Co.
Houghton, Mifflin Co.

Supplementary

American History
History of the United States
The Ancient World
A History of Greek Art
Greek Literature
A Short History of England
History of the American Nation
Readings in History of the Nation
Short History of the U. S.
Gov't of N. E. States
Manual of the Constitution
Civil Government
New Civics
A Short History of England
Ancient History
Greek Leaders

Muzzey
Adams & Trent
West
Tarbell
Jebb
Andrews
McLaughlin
McLaughlin
Bassett
Butler
Andrew
Martin
Ashley
Andrews
Webster
Hopkinson

Ginn & Co.
Allyn & Bacon
Allyn & Bacon
The Macmillan Co.
American Book Co.
Allyn & Bacon
Appleton
Appleton
Macmillan Co.
Scribner
American Book Co.
American Book Co.
Macmillan Co.
Allyn & Bacon
D. C. Heath & Co.
Houghton, Mifflin Co.

*CHEMISTRY, PHYSICS AND OTHER SCIENCES**Adopted*

Descriptive Chemistry
Qualitative Analysis
A Text Book of Physics
First Principles of Physics
Field, Forest & Garden Botany
Outlines of Botany
Plant Studies
Plant Study
Practical Physiology
Human Body
Lessons in Astronomy
Text Book of Geology

Newell
Irish
Hall & Bergen
Carhart & Chute
Gray
Leavitt
Coulter
Meier
Blaisdell
Martin
Young
Brigham

D. C. Heath & Co.
American Book Co.
Henry Holt & Co.
Allyn & Bacon
American Book Co.
American Book Co.
D. Appleton & Co.
Ginn & Co.
Ginn & Co.
Henry Holt & Co.
Ginn & Co.
D. Appleton & Co.

Supplementary

Applied Physics	Hawkins	Longmans, Green & Co.
Advanced Physiology and Hygiene	Conn & Budington	Silver, Burdett & Co.
General Chemistry	Newell	D. S. Heath & Co.
Practical Physics	Black & Davis	Macmillan Co.

BOOKS FOR ELEMENTARY SCHOOLS

ADOPTED JUNE, 1913

Algebra

Wentworth's First Steps.....	Ginn & Co.
------------------------------	------------

Arithmetics

Morey Elementary Part I.....	Scribner's Sons
Morey Elementary, Part II.....	Scribner's Sons
Morey Advanced	Scribner's Sons
Werner Mental	American Book Co.

Dictionaries

Worcester Primary	J. B. Lippincott Co.
Worcester Comprehensive.....	J. B. Lippincott Co.

Geographies

Frye's First Step in Geography.....	Ginn & Co.
Frye's Leading Facts of Geography, Part I.....	Ginn & Co.
Frye's Leading Facts of Geography, Part II.....	Ginn & Co.
Frye's Grammar School Geography.....	Ginn & Co.
Tarr & McMurry Geography, Book I.....	The Macmillan Co.
Tarr & McMurry Geography, Book II.....	The Macmillan Co.
Tarr & McMurry Geography, Book I, Part I.....	The Macmillan Co.
Tarr & McMurry Geography, Book I, Part II.....	The Macmillan Co.
Tarr & McMurry Geography, Book II, Part I.....	The Macmillan Co.
Tarr & McMurry Geography, Book II, Part II.....	The Macmillan Co.

Geographical Readers

Carpenter's Africa	American Book Co.
Carpenter's Asia	American Book Co.
Carpenter's Australia	American Book Co.
Carpenter's Europe	American Book Co.
Carpenter's North America	American Book Co.
Carpenter's South America	American Book Co.
Winslow's The Earth and Its People.....	D. C. Heath & Co.
Winslow's The United States.....	D. C. Heath & Co.
Winslow's Our American Neighbors.....	D. C. Heath & Co.
Winslow's Europe	D. C. Heath & Co.
Winslow's Distant Countries.....	D. C. Heath & Co.
McDonald & Dalrymple's Little People Everywhere:	
Betty in Canada	Little, Brown & Co.
Manuel in Mexico	Little, Brown & Co.
Ume Sam in Japan	Little, Brown & Co.
Rafael in Italy.....	Little, Brown & Co.
Kathleen in Ireland.....	Little, Brown & Co.
Fritz in Germany.....	Little, Brown & Co.
Gerda in Sweden.....	Little, Brown & Co.
Boris in Russia.....	Little, Brown & Co.
Donald in Scotland.....	Little, Brown & Co.
Marta in Holland.....	Little, Brown & Co.
Hassan in Egypt	Little, Brown & Co.
Josefa in Spain.....	Little, Brown & Co.

Histories

Gordy's American	Scribner's Sons
Montgomery's Leading Facts.....	Ginn & Co.
Scudder's American	American Book Co.
Dickson's American	The Macmillan Co.
Tappan's Our Country's Story.....	Houghton, Mifflin Co.
Tappan's England's Story.....	Houghton, Mifflin Co.
Davis's History of the U. S. for Youngest Readers.....	Ed. Pub. Co.
Wilson's Reader	The Macmillan Co.

Historical Readers

Guerber's Stories of the English.....	American Book Co.
Guerber's Stories of the Greeks.....	American Book Co.

Language and Grammar

Mother Tongue, Books I and II.....	Ginn & Co.
Metcalf & Rafter Series, Books I and II.....	American Book Co.
Aldine Language	Newson & Co.

Music Readers

Harmonic Series	American Book Co.
Johnson's Songs of the Nation (Sets of 50).....	Silver, Burdett & Co.

Spellers

Chancellor's Graded City.....	The Macmillan Co.
Reed's Word Lessons.....	C. E. Merrill Co.

Physiology

Gulick Series, Good Health.....	Ginn & Co.
Gulick Series, Emergencies	Ginn & Co.
Gulick Series, Town and City.....	Ginn & Co.
Gulick Series, Body at Work.....	Ginn & Co.
Gulick Series, Control of the Body and Mind.....	Ginn & Co.

Readers

The Aldine Series	Newson & Co.
Baker & Carpenter	The Macmillan Co.
Cyr	Ginn & Co.
Gordon	D. C. Heath & Co.
Jones	Ginn & Co.
Art Literature	Atkinson, Mentzer Co.
Howe	Scribner's Sons
Wheeler.....	W. H. Wheeler & Co.
Williams Choice Literature.....	American Book Co.
The Hiawatha Primer.....	Houghton, Mifflin Co.
The Wide Awake Series.....	Little, Brown & Co.
Child Life Series	The Macmillan Co.
Heath	D. C. Heath & Co.
The Riverside Readers.....	Houghton, Mifflin Co.
Free & Treadwell's Reading Literature. I and II.....	Row, Peterson & Co.
The Haliburton Readers, I and II.....	D. C. Heath & Co.
Progressive Road to Reading, I and II.....	Silver, Burdett & Co.
(1) Blaisdell's Boy Blue and His Friends.....	Little, Brown & Co.
(2) Blaisdell's Polly and Dolly.....	Little, Brown & Co.
(3) Blaisdell's Cherry Tree Children.....	Little, Brown & Co.
(4) Bingham's Merry Animal Tales.....	Little, Brown & Co.
(5) Bryce's Fables from Afar.....	Newson & Co.
(6) Bryce's That's Why Stories.....	Newson & Co.
(7) Bryce's Short Stories for Little Folks.....	Newson & Co.
(8) Smith's Four Footed Friends	

The eight books numbered above are to be furnished for first, second and third grades in sets of not more than twenty-five.

General Literature

Sewell's Black Beauty.....	Ed. Pub. Co.
Defoe's Robinson Crusoe.....	American Book Co.

Masterpieces of American Literature.....	Houghton, Mifflin Co.
Hawthorne's Wonder Book.....	Houghton, Mifflin Co.
Scudder's Fables and Folk Stories.....	Houghton, Mifflin Co.
Hale's A Man Without a Country (Sets of 50)	
Brook's Story of the Old Bay State (Set of 4), Grade 9.....	American Book Co.
Coe's Founders of Our Country (Set of 4), Grade 5	
Lucia's Story of American Discoverers for Little Americans (Set of 4)	
Grade 4	American Book Co.
Stevenson's Children's Classics (Set of 10) :	
Book I for Grade 3.....	Houghton, Mifflin Co.
Book II for Grade 4.....	Houghton Mifflin Co.
Book III for Grades 5 and 6.....	Houghton, Mifflin Co.

Desk Books for Teachers

Hart's Source Readers in American History.....	The Macmillan Co.
Page's American Poets	Houghton, Mifflin Co.
Hazard's Three Years With the Poets.....	Houghton, Mifflin Co.
Johnston's Ireland's Story.....	Houghton, Mifflin Co.
Ashley's Government and Citizen.....	The Macmillan Co.

Writing

Gilman System	Dutton & Co.
---------------------	--------------

*TEXT BOOKS ADDED TO THE LIST**1914*

Standard Reference Work.
Funk and Wagnalls Dictionaries.

1915

O'Shea & Kellog Health Series, published by Macmillan Co.
Business English by Davis & Lingham, published by Ginn & Co.
Office Training for Stenographers.—Gregg.
Standard Dictionary of Facts.

1916

Williams & Rogers, Beldings Correspondence—American Book Co.
Young & Fields Readers—Ginn & Co.
Golden Rule Series—Macmillan Co.
Story Hour Readers—American Book Co.
See & Say Phonics—Iroquois Publishing Co.
Brigham & McFarlane, Essentials of Geography—American Book Co.

1917

Oral and Written English by Potter, Jeschke and Gillett, published by Ginn & Co.
To take the place of Mother Tongue.
Emerson and Bender. Grammar for optional use in ninth grades.
Spellers—Mastery of words, by Sarah Louise Arnold, published by Iroquois Publishing co.
Spellers—Graded School Speller, by Spaulding & Miller, published by Ginn & Co.
These spellers to replace, as spellers are needed, the Reed and the Chancellor spellers which are now in use.
Readers: Everyday Classics by Baker and Thorndike, published by Macmillan Co.
The Merrill Readers by Dyer and Brady, published by Charles E. Merrill Co.
The Elson Readers, by Elson Keek, published by Scott, Foresman & Co.
The Lippincott Readers, by Homer P. Lewis, published by J. B. Lippincott Co.
The Twins Series, by Lucy Fitch Perkins, published by Houghton, Mifflin Co.
Bunny Rabbits Diary by Blaisdell, published by Little, Brown & Co.
Pretty Polly Flinders by Blaisdell, published by Little, Brown & Co.
Old Mother West Wind by Burgess, published by Little, Brown & Co.
For the Desk:—

Arlo by Cobb, published by the Riverside Press.
For the Children's Hour, by Bailey, published by Milton, Bradley Co.
Keep Well Stories by Jones, published by J. P. Lippincott Co.
Wonderland Stories by Lewis, published by J. P. Lippincott Co.
The Travels of Birds by Chapman, published by D. Appleton & Co.

1918

Hart's School History of the United States.
 Powell's The Spirit of Democracy.
 Watkin's The Forum of Democracy.
 Brubacher & Snyder—High School English, Book I.

1919

Practical English, by Lewis and Harris.
 Prose Literature, by Ashman.
 The Deserted Village, Eclectic Edition.
 Quentin Durward, Pocket Classics Edition.
 Oregon Trail, by Parkman, Macmillan Co.
 Inland Voyage and Travels with a Donkey, Eclectic Edition.
 Essays and Essay Writing, The Atlantic Monthly.
 Henry Esmond, Pocket Classics Edition.
 Crawford, Pocket Classics Edition.
 Two Years before the Mast, Pocket Classics Edition.
 Pride and Prejudice, Pocket Classics Edition.
 Mill on the Floss, Pocket Classics Edition.
 The Rivals and The School for Scandal, Pocket Classics Edition.
 The Virginians, Thackeray, Macmillan Co.
 The Call of the Wild, Macmillan Co.
 First Principles of Chemistry (Revised Edition), Allyn and Bacon.
 Laboratory Exercises to accompany First Principles of Chemistry, Allyn and Bacon.

1920

Brief Business Arithmetic, by Sutton and Lenner, Allyn and Bacon.
 Durrell and Arnold's First Book in Algebra, Charles E. Merrill Co.
 Fite's History, Henry Holt & Co.
 Ashley's New Civics, Macmillan Company.



SUMMARY OF THE ANNUAL RETURNS OF THE PUBLIC SCHOOLS OF THE CITY OF LOWELL FOR THE YEAR ENDING JUNE 30, 1920, WITH THE NUMBER OF PUPILS BELONGING DECEMBER, 1920.

SCHOOL	LOCATION	Whole No. Enrolled			No. of Pupils Belonging Dec. 1920			Whole No. Pupils on Registers Since Sept. 1, 1919			Average No. Belonging to School			Average Daily Attendance			No. entered not received from any other public school	No. received from lower grade schools of same grade	No. sent to other public schools of higher grade	No. sent to other public schools of same grade	Per cent. of attendance	No. of class-rooms in regular use	No. of seats or sittings in these rooms	
		Males	Females	Total	Males	Females	Total	Males	Females	Total	Males	Females	Total											
High.....	Kirk and Anne St.....	709	934	1643	722	921	1643	699	944	1643	612	876	1488	595	829	1424	101	468	41	26	1095.7	50	1723	
Grammar	Wannalancit St.....	249	282	531	323	313	636	264	290	554	226	254	480	209	232	441	24	25	41	54	27	91.9	13	625
	Gorham St.....	314	305	619	279	265	544	333	315	648	287	276	563	272	260	532	25	108	36	0	22	94.5	16	739
	Butler.....	150	161	311	144	158	302	159	170	329	134	156	290	129	143	272	28	73	18	15	33	93.7	8	359
	Colburn.....	201	194	395	196	192	388	214	213	427	182	180	362	172	166	338	25	72	52	18	32	93.3	10	493
	Highland and South St.....	288	246	534	226	216	442	301	292	593	239	190	429	225	173	398	190	56	29	23	24	92.7	13	615
	Merrimack St.....	179	199	378	170	184	354	213	219	432	160	175	335	152	162	314	25	63	11	32	7	10	480	
	Ennell St.....	295	314	609	273	260	533	302	327	629	272	286	558	265	243	508	21	102	20	38	30	100.9	10	500
	Lincoln.....	211	191	402	185	168	353	227	201	428	194	170	364	177	154	331	34	71	22	38	10	90.9	10	500
	Moody.....	295	314	609	273	260	533	302	327	629	272	286	558	265	243	508	21	102	20	38	30	100.9	10	500
	Rogers and High St.....	406	409	815	386	379	765	421	428	849	369	369	738	346	345	691	15	123	75	81	61	93.6	16	759
	Pine and Wilder St.....	232	262	494	170	183	353	228	261	489	199	228	427	188	212	400	62	67	12	49	23	93.6	11	570
	Mammoth Rd.....	80	92	172	70	74	144	84	96	180	70	80	150	64	76	140	19	30	13	15	13	93.3	4	182
	Woburn St.....	323	333	656	354	333	687	346	366	712	307	309	616	291	285	576	67	116	33	41	56	93.5	15	828
	Myrtle and Beech St.....	235	203	438	223	220	443	240	213	453	220	189	409	204	174	378	0	27	23	35	28	92.4	11	500
Avery and Lang St.....	Total.....	3163	3191	6354	2999	2945	5944	3332	3391	6723	2859	2862	5721	2694	2625	5319	535	933	385	463	369	92.9	1504	7315
Primary	Agawam St.....	17	19	36	15	16	31	18	19	37	15	16	31	13	13	26	11	5	3	6	7	83.8	1	45
	Annes St.....	51	48	99	71	45	116	79	59	138	63	50	113	57	45	102	45	4	39	33	15	90.2	3	158
	Bartlett.....	134	134	268	113	116	229	148	151	299	118	122	240	106	106	212	69	9	25	76	22	88.3	6	293
	Billings St.....	38	40	78	33	33	66	40	41	81	33	33	66	20	30	58	31	3	1	10	7	90.6	2	108
	Cabot St.....	135	109	244	110	79	189	142	116	258	113	87	200	101	73	174	244	0	14	0	10	87.7	4	200
	Carver St.....	55	55	110	50	55	105	57	59	116	52	51	103	47	45	92	4	0	6	0	4	89.3	3	168
	Central St.....	58	57	115	42	47	89	83	51	134	43	47	90	38	41	79	68	6	23	16	26	87.7	2	102
	Charles St.....	74	81	155	42	70	112	80	89	169	65	78	143	61	75	136	47	0	14	38	10	95.1	4	192
	Colburn.....	92	77	169	94	93	187	104	86	190	78	54	132	66	53	119	56	24	21	33	34	90.1	5	251
	Cross St.....	67	63	130	87	80	167	91	86	177	75	64	139	67	56	123	58	8	47	31	7	88.4	3	181
	Dover St.....	66	89	155	60	77	137	72	85	157	61	81	142	54	71	125	47	23	11	41	4	88	3	154
	Elmer St.....	104	71	175	81	72	153	82	179	86	61	147	82	56	138	64	0	22	37	26	93.8	4	220	
	Franklin.....	76	70	146	50	56	106	84	75	159	68	67	135	62	58	120	46	23	18	25	17	88.8	4	172
	Grand St.....	72	67	139	54	59	113	83	76	159	61	55	116	54	47	101	56	3	20	36	17	89.1	3	144
Greenhalge.....	89	93	182	107	107	214	96	104	200	72	76	148	64	68	132	73	16	15	20	11	89.1	4	199	
Kirk St.....	15	16	31	7	9	16	15	16	31	12	12	24	10	11	21	11	0	1	2	11	87.5	1	24	

SUMMARY OF THE ANNUAL RETURNS OF THE PUBLIC SCHOOLS—Continued

Lakeview Ave.....	72	70	142	68	67	135	78	75	153	68	116	118	67	135	63	102	105	62	125	35	22	10	30	4	92.5	3	160
Lakeview Ave.....	123	137	260	98	90	188	134	143	277	116	118	234	102	105	62	125	35	22	10	30	4	92.5	3	160			
Laura Lee.....	66	60	126	54	55	109	63	62	111	44	42	86	41	39	80	2	15	25	493.3	0	17	82	3688.4	5	280		
London St.....	48	48	96	50	42	92	59	52	111	44	42	86	41	39	80	2	15	25	493.3	0	17	82	3688.4	5	280		
Central and Lyon St.....	57	60	117	91	114	205	61	81	142	51	68	119	45	61	106	50	3	30	1594.9	3	30	30	1594.9	3	130		
*New Moody.....	62	81	143	57	67	124	80	72	152	62	64	126	56	57	113	24	28	13	46	689.6	3	168	689.6	3	168		
Pawtucket.....	76	69	145	87	75	162	107	89	196	88	80	168	79	73	152	46	6	7	23	3290.4	4	199	3290.4	4	199		
Pine St.....	100	82	182	87	75	162	107	89	196	88	80	168	79	73	152	46	6	7	23	3290.4	4	199	3290.4	4	199		
Pond and High St.....	57	49	106	47	44	91	74	48	111	51	45	96	46	40	86	35	6	7	23	789.5	2	102	789.5	2	102		
Powell St.....	68	41	109	57	34	91	74	48	111	51	45	96	46	40	86	35	6	7	23	789.5	2	102	789.5	2	102		
Riverside.....	34	36	70	29	24	53	28	30	58	24	26	50	67	0	3	16	5	86.2	5	10	3	16	5	86.2	5	10	
Woburn St.....	110	97	207	79	92	171	119	107	221	90	70	160	80	60	140	73	20	20	59	1887.5	4	203	1887.5	4	203		
Sycamore St.....	58	63	121	55	59	114	60	64	124	51	57	108	43	48	91	50	2	6	0	784.2	3	120	784.2	3	120		
Tenth St.....	43	44	87	34	34	68	43	46	89	39	37	76	35	33	68	38	0	5	16	689.4	2	105	689.4	2	105		
Washington.....	104	101	205	79	68	157	105	114	219	92	87	179	87	81	168	61	12	23	46	2093.8	4	220	2093.8	4	220		
Avery and Lang St.....	98	97	195	69	68	135	103	100	203	64	67	131	59	60	119	106	0	6	21	4890.8	3	159	4890.8	3	159		
West Sixth St.....	2319	2224	4543	1937	1922	3859	2548	2393	4941	2021	1928	3949	1820	1723	3543	1697	274	444	886	462	89.7	101	5079	462	89.7	101	
Worthen St.....	29	27	56	25	23	48	29	27	56	25	22	47	23	18	41	21	0	0	0	7	87.2	2	60	7	87.2	2	60
Total.....	80	62	142	72	49	121	80	62	142	69	50	119	60	44	104	18	1	7	9	1087.3	3	152	1087.3	3	152		
Mixed	109	89	198	97	72	169	109	89	198	94	72	166	83	62	145	39	1	7	9	1787.3	5	212	1787.3	5	212		
Lexington Ave.....	11	11	22	9	13	22	11	11	22	6	10	16	5	7	12	22	0	0	10	275	1	20	275	1	20		
Cornell St.....	23	30	53	19	22	41	23	31	54	15	16	31	12	14	26	53	0	1	29	283.8	1	40	283.8	1	40		
Kindergarten	14	19	33	12	13	25	15	19	34	10	9	19	8	7	15	33	0	1	1	278.9	1	24	278.9	1	24		
Agawam St.....	24	28	52	17	18	35	24	28	52	14	17	31	12	13	25	52	0	0	20	80.6	1	34	80.6	1	34		
Bartlett.....	18	20	38	17	17	34	21	20	41	13	15	28	9	11	20	38	0	3	30	171.4	1	33	171.4	1	33		
Central St.....	24	21	45	15	9	24	24	21	45	13	13	26	10	12	22	45	0	0	1	684.6	1	39	684.6	1	39		
In Colburn Primary.....	59	54	118	72	25	19	44	54	118	72	29	10	39	22	7	29	67	0	3	32	674.3	1	50	674.3	1	50	
Dover St.....	24	23	52	24	15	39	31	24	55	12	9	21	10	7	17	52	0	3	0	380.9	1	34	380.9	1	34		
Franklin.....	14	12	36	16	14	30	24	13	37	15	10	25	12	9	21	30	0	1	3	184	1	46	184	1	46		
Howard St.....	17	19	36	15	13	28	19	19	38	11	12	23	7	12	19	40	0	2	19	82.6	1	29	82.6	1	29		
In Howard St. Annex.....	25	24	46	25	17	32	15	24	39	9	14	23	7	12	19	40	0	2	19	82.6	1	29	82.6	1	29		
In Laura Lee Primary.....	15	21	46	25	21	46	25	21	46	17	16	33	13	12	25	46	0	0	30	675.7	1	47	675.7	1	47		
Laura Lee.....	29	44	73	24	39	63	29	44	73	24	39	63	29	44	73	24	44	4	4	377.2	1	58	377.2	1	58		
Moody.....	15	8	23	14	5	19	16	8	23	14	6	20	8	4	12	14	0	2	8	60.0	1	51	60.0	1	51		
Pawtucket.....	322	298	620	247	243	490	331	301	632	197	182	379	153	144	297	599	0	19	247	2778.3	17	535	2778.3	17	535		
In Pine St. Primary.....	161	79	240	167	116	283	194	88	282	124	56	180	107	49	156	67	114	18	0	1	86.6	15	50	1	86.6	15	50
Varnum School.....	709	934	1643	722	921	1643	699	944	1643	612	876	1488	595	829	1424	101	468	41	26	1095.7	50	1723	1095.7	50	1723		
West St. Primary.....	3163	3191	6354	2999	2945	5944	3332	3391	6723	2859	2862	5721	2694	2625	5319	535	385	463	369	92.9	150	7315	369	92.9	150	7315	
Total.....	2319	2224	4543	1937	1922	3859	2548	2393	4941	2021	1928	3949	1820	1723	3543	1697	274	444	886	462	89.7	101	5079	462	89.7	101	
Broadway and Common St.....	109	89	198	97	72	169	109	89	198	94	72	166	83	62	145	39	1	7	9	1787.3	5	212	1787.3	5	212		
High.....	322	298	620	247	243	490	331	301	632	197	182	379	153	144	297	599	0	19	247	2778.3	17	535	2778.3	17	535		
Grammar.....	6622	6736	13358	6002	6103	12105	7019	7118	14137	5783	5920	11703	5343	5383	10728	2971	11676	896	1631	885	323	14864	885	323	14864		
Primary.....	109	89	198	97	72	169	109	89	198	94	72	166	83	62	145	39	1	7	9	1787.3	5	212	1787.3	5	212		
Mixed.....	322	298	620	247	243	490	331	301	632	197	182	379	153	144	297	599	0	19	247	2778.3	17	535	2778.3	17	535		
Kindergarten.....	6622	6736	13358	6002	6103	12105	7019	7118	14137	5783	5920	11703	5343	5383	10728	2971	11676	896	1631	885	323	14864	885	323	14864		
Total.....	322	298	620	247	243	490	331	301	632	197	182	379	153	144	297	599	0	19	247	2778.3	17	535	2778.3	17	535		

*Schools closed in September, 1920



INDEX

Administration	4-6
Attendance Officers' Report.....	38
Certificates granted	61
Continuation Schools	35
Elections	13-14
Evening Schools	35-36
Evening School Summary.....	37
Evening School Teachers.....	56-59
General Statistics	7-8
High School	16
In memoriam	15
Junior High Schools.....	31-34
List of Text Books.....	62-70
Medical and dental supervision.....	16-19
Organization of School Committee, 1920.....	3
Organization of School Committee, 1921.....	5
Physical Education	28-29
Primary Supervisor	29-30
Pupils by grades.....	16
Receipts and Expenditures.....	8-9-10
Receipts and Expenditures (Discussion).....	11
Resignations	13
Retirements	13
Roll of day teachers.....	40-59
Salary Schedule	59
Schoolhouses	12
School and home gardens.....	25-27
School census	11-12
School nursing	16-19
School physicians	17-55
School savings banks.....	19
School hours	36
Sight and hearing tests.....	19
Summary of annual returns.....	72-73
Vacations	36
Vocational school	19-25

CITY OF LOWELL

MASSACHUSETTS

EIGHTY-FIFTH ANNUAL REPORT

OF THE

CITY AUDITOR



FOR THE FINANCIAL YEAR

1920

Municipal Council

1920

MAYOR

PERRY D. THOMPSON

Commissioner Public Safety

ALDERMAN

JAMES E. DONNELLY

Commissioner Finance

ALDERMAN

DENNIS A. MURPHY

Commissioner Streets and Highways

ALDERMAN

GEORGE E. MARCHAND

Commissioner Property and Licenses

ALDERMAN

JOHN F. SALMON

Commissioner Fire and Water Department

CITY OF LOWELL

Lowell is situated at the confluence of the Merrimack and Concord Rivers. Was settled in 1653, called Chelmsford Grant. First Town Meeting in 1654. Was originally a part of Chelmsford.

Owens its own water supply.

Incorporated as a Town in 1826.

Incorporated as a City in 1836.

Part of Tewksbury annexed in 1834, 1847, 1898, 1906.

Part of Dracut annexed in 1851, 1874, 1879.

Part of Chelmsford annexed in 1826, 1874.

Population, 112,759.

Has 219.63 miles of streets, 145.23 accepted, 74.40 unaccepted.

Has 127.43 miles of sewers, costing \$6,988,849.91.

Has an area of 14.1 square miles.

Assessed valuation 123,919,102.00 and 28,330 assessed polls.

Tax rate \$27.20 per \$1,000.00 per cent. of valuation 100.

Bonded indebtedness, \$4,547,685.00, sinking funds \$351,411.58.

City Hall and Memorial Building costing \$450,000.

School Department—58 day High School teachers, 277 day elementary school teachers, 39 evening High School teachers, 31 evening elementary school teachers, Americanization Classes teachers 17, Continuation Classes teachers 15.

Fire Department—172 officers and men, 168 fire alarm boxes, 1466 hydrants, 19 fire apparatus, (not including water tower).

Water Department—Date of construction, 1870 to 1873; high service, 1881; driven wells, 1893 to 1916.

Source of supply—Two hundred ten (210) driven wells in the valley of River Meadow Brook, and four hundred seventy-nine (479) driven wells at Pawtucket Boulevard.

Mode of supply—Pumping to reservoir and pumping direct. Filtered through coke and sand.

Daily capacity 14,000,000 gallons; 157.46 miles mains; reservoir capacity 5 days' supply; consumes 5,442.967 daily.

Park Department—149.255 acres of parks and playgrounds valued at \$703,419.00.

Has five National Banks, two Trust Companies.

Has eight Savings Banks.

Has three Co-operative Banks.

Has 16½ miles waterways.

Develops about 30,000 h. p. daily by means of 6½ miles of canals which furnish power for manufacturing plants.

Has the largest Textile School.

Has more than 1000 manufacturing plants.

Auditor's Department

CITY OF LOWELL, MASSACHUSETTS

That the Auditor, with the exception of monthly bills approved by the Municipal Council, issue no warrant to pay any bill without THREE signatures of the Municipal Council.

All bills or claims for work performed must be presented to the DEPARTMENT ORDERING SAME; those for supplies furnished and contracts must be presented to the PURCHASING AGENT.

All bills or claims must be received by the City on or before the FIRST day of the month.

All department receipts must be sent to the Purchasing Agent on or before the THIRD day of the month.

All bills or claims shall be presented to the Commissioner of the Department contracting the same on or before the THIRD day of each month.

All bills after approval by the Commissioner, shall be listed and sent to the Auditor's Department not later than the EIGHTH day, for final approval by the Municipal Council.

ALL BILLS OR OTHER CLAIMS, BEFORE THEY ARE FINALLY CERTIFIED BY THE AUDITOR OR PAID SHALL BE APPROVED BY THE MUNICIPAL COUNCIL.

Bills will be paid on the FIFTEENTH day of each month.

OFFICES IN THE CITY HALL ARE OPEN FROM 9 A. M. UNTIL 4 P. M. EXCEPT SATURDAY.

Auditing Department

To the Municipal Council of the City of Lowell,

GENTLEMEN :—

Pursuant to the provisions of law made and provided, hereinafter is submitted a report of the City Auditor of the City of Lowell, concerning all business transactions of the city during the fiscal year of 1920.

Respectfully,

J. JOSEPH HENNESSY,
City Auditor.

SUMMARY OF ASSESSMENTS, ETC. IN THE YEAR 1920

	Number	Totals
Polls at commitment	27341	
Supplementary polls	989	
Total number	28330 at \$5.00	\$141,650.00
	Valuations	
Property	Supple. in December	
At Commitment		
Personal	\$ 31,386,452.00	
Real	92,417,375.00	
Totals	\$123,803,827.00	
	Totals	
Personal	\$ 31,498,727.00	\$ 856,765.37
Real	92,420,375.00	2,513,834.20
Totals	\$123,919,102.00	\$3,370,599.57
	Taxes	
At Commitment		
Personal	\$ 853,711.49	\$ 3,053.88
Real	2,513,752.60	81.60
Totals	\$3,367,464.09	\$ 3,135.48
	Supplementary	
Personal		
Real		
Totals		
Total property tax	\$3,370,599.57	
Total assessments	141,650.00	
1920 total tax on polls and property	\$3,512,249.57	
	Non-resident bank val. and tax not included in valuation proper	
	Valuation	
	\$445,311.00 tax	12,112.46
	Total tax account for which warrants were issued ..	\$3,524,362.03
Special: Total number of polls 28330 at \$3.00 each payable to state		84,990.00
Balance represents Levy and Supplementary Taxes		\$3,439,372.03

City Appropriations	\$2,968,650.00
Income Tax Distribution deduct	113,777.62
	<u>\$2,854,872.38</u>
Net City Appropriations to raise	
State Tax	\$298,480.00
State Highway Tax	2,694.11
State Grade Crossings Tax	2,240.00
State Special Tax for Army and Navy Men	14,071.20
State Bay State Street Railway Tax	4,934.54
State Resolve for Imp. of Hale's Brook	69.61
	<u>322,489.46</u>
Total for State	\$322,489.46
County Tax	130,781.10
	<u>3,308,142.94</u>
Total up to Overlay	114,003.15
Overlay	
Grand Total City Tax at Commitment	3,422,146.09
Non-res. bank shares val. \$445,311.00 and tax	12,112.46
Supplementary Tax in December	5,113.48
	<u>3,439,372.03</u>
Total amount of Taxes in 1920	84,996.00
Folls of 1920 28330 at \$3.00, State portion	
Total amount for which warrants were issued on Taxes	\$3,524,362.03
Street Sprinkling Tax	25,405.45
Moth Tax	3,209.55
	<u>\$3,552,977.03</u>
Total amount of all for which warrants were issued	

Year	Re-assessments			Net Abatements			
	Total Abatements	Before Payment	After Payment	Before Payment	After Payment	Poll Tax	Totals
1917	\$14,346.40	\$14,336.40	\$ 10.00			\$10,940.00	\$14,336.40
1918	\$ 1,421.31	465.59	955.72			36.00	465.59
1919	6,975.90	6,677.00	352.20	\$ 96.20		2,712.00	6,527.50
1920	22,948.49	21,767.56	1,180.93	\$ 2,743.80	\$ 265.20	5,277.00	18,758.56
Street Sprinkling							
1918	\$ 8.63	\$ 8.63		\$ 5.04			\$ 3.59
1919	5.04	5.04		5.04			
1920	131.24	129.55	1.69	14.35	\$ 1.69		113.51
Moth Tax							
1917	\$ 13.85	\$ 13.85					\$ 13.85
1918	.40	.40					.40
1919	1.20	1.20					1.20
1920	3.50	3.50		\$ 3.50			

The following figures pertain to the obtaining of the Municipal Debt for the year 1921.

	Total City Valuations	Net Property Tax Abatements	Rate per \$1000.00	Amount of Abatements in Terms of Valuation	Net Valuations Abatements Deducted
1918	\$ 98,939,125.00	\$ 8,813.09	\$23.80	\$ 370,297.90	\$ 98,568,827.10
1919	107,315,763.00	7,840.20	26.00	301,546.15	107,014,216.85
1920	123,919,102.00	13,481.56	27.20	495,645.59	123,423,456.41
	<u>\$330,173,990.00</u>	3 years valuations		<u>\$1,167,489.64</u>	<u>\$329,006,500.36</u>
	1,167,489.64	Valuation abated			
	<u>329,006,500.36</u>	Net 3 years valuation			
		Average valuation			
		2½ per cent. of this average gives limit of municipal debt for 1921.			
	109,668,833	Limit of municipal debt for the year 1921.			
	025				
	<u>\$2,741,720.82</u>				

Average valuation

2½ per cent. of this average gives limit of municipal debt for 1921.

Limit of municipal debt for the year 1921.

BALANCE SHEET

DECEMBER 31, 1920

Dr.		Cr.
\$ 303,518.52	Cash	
1,069.64	Taxes 1915.....	
8,687.64	“ 1916.....	
15,457.54	“ 1918.....	
219,885.76	“ 1919.....	
782,449.38	“ 1920.....	
1.60	Moth 1918.....	
285.30	“ 1919.....	
847.55	“ 1920.....	
14.55	Sprinkling 1915.....	
	“ 1918.....	\$ 1.19
3,071.30	“ 1919.....	
7,102.36	“ 1920.....	
	Overlay 1916.....	1,732.31
	“ 1917.....	295.39
	“ 1918.....	23,678.92
	“ 1920.....	94,979.39
2,822.29	Tax Titles	
1,647.46	Sidewalk Assessment	
4,148.60	Sewer Assessment	
38,522.68	Department Accts. Rec.	
4,881.21	Cemetery Accts. Rec.	
7,508.04	Water Accts. Rec.	
	Tax Revenue Loans	1,200,000.00
58,757.54	Revenue Appropriation	
	Cemetery Revenue	4,881.21
	Water Revenue	7,508.04
	Other Revenue	41,506.37
	Premiums	17,386.09
	Sidewalk Revenue	1,647.46
	Sewer Revenue	4,148.60
10,249.36	Excise Tax	
<u>\$1,470,928.32</u>		<u>\$1,470,928.32</u>
Non-Revenue		
\$ 505,740.80	Cash	
	Appropriations	\$2,015,740.80
\$1,510,000.00	Loans Authorized	
<u>\$2,015,740.80</u>		<u>\$2,015,740.80</u>

CITY OF LOWELL, DEC. 31, 1920

THE MUNICIPAL DEBT

Gross Debt

Total Ordinary City Debt	\$4,176,935.00
Total Water Works Debt	370,750.00
Total Tax Revenue Loans	1,200,000.00
Gross Debt December 31, 1920	\$5,747,685.00

Net City Debt

Total Ordinary Debt, January 1, 1920	\$3,499,085.00
Sinking Fund	351,411.58
Total	\$3,147,673.42
Payments on Ordinary Debt 1920	344,150.00
Total	\$2,803,523.42
Sinking Fund Payment, City Hall & Memorial Building	450,000.00
Total	\$2,353,523.42
Loans 1920	1,472,000.00
Net Debt	\$3,825,523.42

Net Water Debt

Total Ordinary Water Debt, January 1, 1920	\$1,418,750.00
Payments 1920	63,000.00
Total	\$1,355,750.00
Sinking Fund Payment Water Loan	1,000,000.00
Total	\$ 355,750.00
Loans 1920	15,000.00
Total	\$ 370,750.00

Total Net City Water Debt December 31, 1920

City	\$3,825,523.42
Water	370,750.00
Total	\$4,196,273.42

INDEBTEDNESS

December 31, 1920

Sinking Funds		Funded Debt	
Cash and Securities			
High School Fund	\$ 173,077.46	High School Loan payable 1921	\$ 150,000.00
New Schoolhouse Fund	178,334.12	New Schoolhouse Loan payable 1926	200,000.00
Net bonded debt	4,196,273.42	General City 4% Loan	1,285,135.00
		4 1/4%	79,800.00
		4 1/2%	1,279,550.00
		4 3/4%	405,000.00
		5%	850,000.00
		5 1/2%	244,000.00
		6%	28,000.00
		Nesmith Fund 1870	25,000.00
		Nesmith Fund 1870	1,000.00
		City paying 6 per cent.	
		Carney Medal Fund	200.00
\$4,547,685.00		\$4,547,685.00	

TRUST FUNDS

Cash and Securities	\$ 302,860.08	Carney Medal Fund	\$ 200.00
*Cash Used by City in 1870, and now paying 6 per cent.	26,200.00	Hapgood Wright Fund	13,255.57
*Carney Medal Fund	200.00	John Davis Library Fd.	100,727.43
		Jonathan Tyler Fund	10,900.00
		Thos. Nesmith Fund	25,000.00
		Thos. Nesmith Fund	1,000.00
		Cemetery Perpetual Care	151,719.48
		Unpaid Debt and Interest	26,357.50
		Joseph Henry Stackpole Fund	1,000.00
*No cash in these Funds			
	\$ 329,260.08		\$ 329,260.08

Property

Dr.		Cr.
\$2,029,376.67	Water Works	
2,094,890.00	Schools	
2,751,247.42	General Departments	
	City of Lowell (Balancing account)	\$6,875,514.09
\$6,875,514.09		\$6,875,514.09

DEBT LIMIT, 1920

Total Ordinary Debt, Jan. 1, 1920	\$3,499,085.00
Total Water Works Debt, Jan. 1, 1920	1,418,750.00
Total Tax Revenue Loans, Jan. 1, 1920	800,000.00
Total Gross Debt, Jan. 1, 1920	\$5,717,835.00

Outside Limit of Indebtedness

Deduct by Legislation outside limit of indebtedness:	
Water	\$1,418,750.00
Special Legislation	1,195,000.00
Tax Revenue Loan	800,000.00
City Debt as relates to limit of indebtedness	\$2,304,085.00
Limit of Municipal Debt for 1920	\$2,469,161.08
City Debt as relates to Limit	2,304,085.00
Distance from Limit Jan. 1, 1920	165,076.08
Distance from Limit Dec. 1, 1920	137,226.08
Borrowing limit year 1920	509,226.08

1920 Loans

Sewer Construction—25 years—Negotiated	\$ 50,000.00
Water Works Equipment—5 years—Negotiated	15,000.00
Permanent Paving—10 years—Negotiated	80,000.00
Macadam Paving—5 years—Negotiated	40,000.00
High School, Acts 1919—20 years—Negotiated	300,000.00
New Sidewalks—2 years—Negotiated	10,000.00
Bridge Construction—10 years—Negotiated	20,000.00
Auditorium—14 years—Negotiated	140,000.00
Auditorium—6 years—Negotiated	60,000.00
Bridge Construction—18 years—Negotiated	72,000.00
School Houses—5 years—Negotiated	10,000.00
Auditorium—20 years—Negotiated	200,000.00
Acquiring Land for Public Parks—12 years—Negotiated	12,000.00
Widening Locke St.—6 years—Negotiated	12,000.00
Sidewalks—3 years—Negotiated	6,000.00
Sewer Construction—20 years—Negotiated	20,000.00
New High School—20 years—Negotiated	400,000.00
Macadamizing—5 years—Negotiated	20,000.00
Sewer Construction—20 years—Negotiated	20,000.00
	<u>\$1,487,000.00</u>
Borrowed inside limit of indebtedness	\$ 372,000.00
Borrowed outside limit of indebtedness	1,115,000.00
	<u>\$1,487,000.00</u>

Loans Authorized, not negotiated 1920:

New High School	\$1,050,000.00
New High School:	
Total Authorized Loans	\$2,050,000.00
Borrowed prior to 1920	\$300,000.00
Borrowed in 1920	700,000.00
	<u>\$1,000,000.00</u>
Balance not yet negotiated	\$1,050,000.00

Lowell Memorial Auditorium:

Authorized in 1919	\$1,000,000.00
Loans in 1919	140,000.00
Loans in 1920	400,000.00
Not Negotiated	460,000.00

CLASSIFICATION OF
RECEIPTS AND PAYMENTS
BY SCHEDULES
Year 1920

RECEIPTS

SOURCES OF RECEIPTS	Revenue for Expenses	Revenue for Outlays	Total
General Revenue			
1. Taxes:			
<i>Current Year</i>			
1. Property	\$2,609,037.89		
2. Poll	113,851.00		
<i>Previous Years</i>			
3. Property	518,993.72		
4. Poll	13,770.00		
<i>From the State</i>			
5. Corporation	274,643.97		
6. Street Railway (exclusive of Boston Elevated excise tax)	399.01		
7. Bank	3,912.66		
<i>Income Tax</i>	204,247.52		
Income Tax (Schools)	66,000.00		
Tax Title Redemption	994.68		
Total from Taxes	\$3,805,850.45		\$3,805,850.45
2. Licenses and Permits:			
<i>Licenses</i>			
8. Liquor	16.00		
9. All Other	9,162.00		
<i>Permits</i>			
10. Marriage	1,381.00		
11. All Other			
Total from Licenses and Permits	\$ 10,559.00		\$ 10,559.00
3. Fines and Forfeits:			
12. Court	\$ 9,783.06		
13. Department Penalties			
14. Contract Violations			
Total from Fines and Forfeits	\$ 9,783.06		\$ 9,783.06
Total forward			\$3,826,192.51

RECEIPTS

SOURCES OF RECEIPTS	Revenue for Expenses	Revenue for Outlays	Total
Total forward			\$3,826,192.51
4. Grants and Gifts:			
<i>Grants from Other Civil Divisions</i>			
15. From State, for Education (Smith-Hughes Fund)	\$ 3,364.00		
a. Support of Public Schools			
b. Aid to High Schools			
c. Aid to Industrial Schools	14,633.63		
d. High School Tuition			
e. Union Superintendency			
16. From State, for Armories			
17. From State, for Highway Purposes			
18. From State, for Other Pur- poses			
a. Inspector of Animals			
b. Protection against Forest Fires			
c.			
d.			
19. From County (Dog Li- censes), for Schools or Libraries	3,708.47		
<i>Gifts from Individuals</i>			
20. For Expenses			
21. For Outlays			
Total from Grants and Gifts	\$ 21,706.10		\$ 21,706.10
5. All Other General Revenue:			
22.			
23.			
Total from All Other General Revenue			
Total Forward			\$3,847,898.61

RECEIPTS

SOURCES OF RECEIPTS	Revenue for Expenses	Revenue for Outlays	Total
Total forward			\$3,847,898.61
Commercial Revenue			
6. Special Assessments:			
24. Street Sprinkling	\$ 25,539.61		
25. Moth Extermination	3,109.13		
26. Sewers	4,775.62		
27. Sidewalks and Curbing	2,985.99		
28. Other Purposes			
 Total from Special Assessments	 \$ 36,410.35		 \$ 36,410.35
7. Privileges:			
29. Public Service			
30. Minor			
 Total from Privileges			
Total forward			\$3,884,308.96

RECEIPTS

SOURCES OF RECEIPTS	Revenue for Expenses	Offsets to Outlays	Total
Total forward			\$3,884,308.96
8. Departmental			
8a. General Government			
<i>Legislative</i>			
31. Aldermen and Council; Moderator			
<i>Executive</i>			
32. Mayor; Commisison; Select- men			
Sunday Concert Permits	\$ 3,688.00		
<i>Financial</i>			
33. Auditor, Accounting and Auditing			
34. Treasurer			
35. Collector	2,416.07		
36. Assessors			
37. License Commissioners	16.00		
38. Other Finance Offices and Accounts			
<i>Other General Departments</i>			
39. Law			
40. City or Town Clerk	2,043.03		
General Government forward	\$ 8,163.10		
Total forward			\$3,884,308.96

PAYMENTS

OBJECTS OF PAYMENTS	Expenses	Outlays	Total
1. Departmental			
1a. General Government			
<i>Legislative</i>			
1. Commissioners			
a. Salaries and Wages	\$ 10,000.00		
b. Other Expenses			
<i>Executive</i>			
2. Mayor; Commission; Selectmen			
a. Salaries and Wages	5,069.89		
b. Other Expenses	559.78		
<i>Financial</i>			
Auditing City Books	977.50		
3. Auditor, Accountant, and Auditing			
a. Salaries and Wages	7,581.84		
b. Other Expenses	559.61		
4. Treasurer			
a. Salaries and Wages	16,093.70		
b. Other Expenses	5,390.28		
5. Collector			
a. Salaries and Wages			
b. Other Expenses			
6. Assessors			
b. Other Expenses			
Assessors Tax Books	2,094.75		
a. Salaries and Wages	21,119.40		
b. Other Expenses	1,331.65		
7. License Commissioners			
a. Salaries and Wages	5,308.03		
b. Other Expenses	231.06		
8. Other Finance Offices and Accounts			
a. Sinking Fund Commissioners			
b. Miscellaneous			
<i>Other General Departments</i>			
9. Law			
a. Salaries and Wages	4,480.25		
b. Other Expenses	695.98		
10. City or Town Clerk			
a. Salaries and Wages	9,864.50		
b. Other Expenses	710.06		
General Government forward	\$ 92,068.28		

RECEIPTS

SOURCES OF RECEIPTS	Revenue for Expenses	Offsets to Outlays	Total
Total forward			\$3,884,308.96
General Government forward	\$ 8,163.10		
41. City Messenger			
42. Public Works			
43. Engineering			
44. Superintendent of Buildings ..			
45. Election and Registration			
46. Other General Departments ..			
<i>Municipal Buildings</i>			
47. City or Town Hall			
Total from General Government	\$ 8,163.10		\$ 8,163.10
8b. Protection of Persons and Property:			
<i>Police Department</i>			
48. Services of Officers	\$ 107.46		
49. Sale of Materials			
50. Miscellaneous			
Protection of Persons and Prop- erty forward	\$ 107.46		
Total forward			\$3,892,472.06

PAYMENTS

OBJECTS OF PAYMENTS	Expenses	Outlays	Total
General Government forward	\$ 92,068.28		
11. City Messenger			
a. Salaries and Wages	1,894.65		
b. Other Expenses	95.10		
12. Public Works			
a. Salaries and Wages			
b. Other Expenses			
13. Engineering			
a. Salaries and Wages	7,781.51		
b. Other Expenses	676.57		
14. Superintendent of Buildings ..			
a. Salaries and Wages	2,395.62		
b. Other Expenses			
15. Election and Registration			
a. Salaries and Wages	23,880.71		
b. Other Expenses	3,689.80		
16. Other General Departments ..			
Purchasing Agent	7,847.70		
Registrar of Labor	715.63		
<i>Municipal Buildings</i>			
Payment City Hall Sinking Fund	450,000.00		
17. City or Town Hall			
a. Salaries and Wages	17,630.75		
*b. Other Expenses	16,707.55		
Total for General Government ..	\$ 625,383.87		\$ 625,383.87
1b. Protection of Persons and Property:			
<i>Police Department</i>			
18. Salaries and Wages	\$ 283,105.09		
19. Horses and Care of Same	482.95		
*20. Equipment and Repairs	1,081.52	\$ 50.50	
21. Fuel and Light	2,355.94		
22. Maintenance of Buildings and Grounds			
*23. New Buildings			
24. Other Expenses	13,157.18		
Protection of Persons and Property forward	\$ 300,182.68	\$ 50.50	
Total forward			\$625,383.87

*Entries for construction or new equipment should be made in the second column.

RECEIPTS

SOURCES OF RECEIPTS	Revenue for Expenses	Offsets to Outlays	Total
Total forward			\$3,892,472.06
Protection of Persons and Prop- erty forward	\$ 107.46		
<i>Fire Department</i>			
51. Sale of Materials	621.37		
52. Miscellaneous			
Sale Westford Street En- gine House		\$ 16,503.61	
<i>Militia</i>			
53. Armories			
54. Rifle Ranges			
<i>Inspection</i>			
55. Inspection of Buildings	3,118.83		
56. Inspection of Wires	447.24		
57. Sealing of Weights and Measures	1,380.69		
<i>Forestry</i>			
58. Insect Pest Extermination	90.10		
59. Planting and Trimming Trees			
60. Forest Fires			
<i>Other Protection of Persons and Property</i>			
61. Bounties			
62.			
63.			
Total from Protection of Persons and Property	\$ 5,765.69	\$ 16,503.61	\$ 22,269.30
Total forward			\$3,914,741.36

PAYMENTS

OBJECTS OF PAYMENTS	Expenses	Outlays	Total
Total forward			\$ 625,383.87
Protection of Persons and Property forward	\$ 300,182.68	\$ 50.50	
<i>Fire Department</i>			
25. Salaries and Wages	301,832.07		
26. Horses and Care of Same	8,983.81		
*27. Equipment and Repairs	222.21	\$ 18,255.00	
28. Hydrant Service (Water) ..	827.21		
29. Fuel and Light	9,609.70		
30. Maintenance of Buildings and Grounds			
*31. New Buildings		3,126.80	
32. Other Expenses	9,502.63		
<i>Militia</i>			
33. Armories			
34. Rifle Ranges	1,483.71		
<i>Inspection</i>			
35. Inspection of Buildings	124,945.96		
36. Inspection of Wires	4,736.50		
37. Sealing of Weights and Measures	7,974.40		
<i>Forestry</i>			
38. Insect Pest Extermination	8,487.48		
40. Forest Fires			
<i>Other Protection of Persons and Property</i>			
41. Bounties			
42. Fish and Game Wardens	150.00		
43. Pound Keeper	5.00		
44. Waterways	4.68		
Total for Protection of Persons and Property	\$ 778,948.04	\$ 21,432.30	\$ 800,380.34
Total forward			\$1,425,764.21

*Entries for construction or new equipment should be made in the second column.

RECEIPTS

SOURCES OF RECEIPTS	Expenses for Revenue	Offsets to Outlays	Total
Total forward			\$3,914,741.36
8c. Health and Sanitation:			
<i>Health</i>			
64. Quarantine and Contagious Disease	\$ 1,754.25		
65. Tuberculosis			
66. Miscellaneous	1,145.84		
67. Inspection			
Milk	373.50		
<i>Sanitation</i>			
68. Sewers and Sewage Disposal			
69. Sewer Construction		\$ 241.18	
70. Refuse and Garbage Disposal	3,997.46		
71. Street Cleaning			
<i>Other Health and Sanitation</i>			
72. Comfort Station	904.75		
73.			
Total from Health and Sanitation	8,175.80	241.18	8,416.98
Total forward			\$3,923,158.34

PAYMENTS

OBJECTS OF PAYMENTS	Expenses	Outlays	Total
Total forward			\$1,425,764.21
1c. Health and Sanitation:			
<i>Health</i>			
45. General Administration	\$ 6,610.19		
*46. Quarantine and Contagious Disease Hospitals	4,665.25		
*47. Tuberculosis	9,892.01		
48. Vital Statistics	990.85		
49. Other Expenses	18,098.07		
50. Inspection			
a. Inspection of School Children	800.00		
b. Inspection of Animals	600.00		
c. Inspection of Meat and Provisions	1,003.75		
d. Inspection of Milk and Vinegar	3,706.44		
<i>Sanitation</i>			
51. Sewer Maintenance and Operation	21,346.06		
52. Metropolitan Sewer Mainte- nance			
*53. Eewer Construction		\$ 95,438.36	
*54. Refuse and Garbage Disposal	131,219.03		
*55. Street Cleaning			
e. Inspection of Smoke	365.67		
<i>Other Health and Sanitation</i>			
*56. Sanitaries and Public Con- venience Stations	9,938.06		
57. Care of Brooks and Streams			
58. Draining of Ponds			
59. Isolation Hospital	25,479.12	20,012.50	
Public Bath and Comfort Station		9,126.83	
Total for Health and Sanitation	\$ 234,714.50	\$ 124,577.69	359,292.19
Total forward			\$1,785,056.40

*Entries for construction or new equipment should be made in the second column.

RECEIPTS

SOURCES OF RECEIPTS	Revenue for Expenses	Offsets to Outlays	Total
Total forward			\$3,923,158.34
8d. Highways:			
74. General	\$ 1,504.24		
75. Construction			
76. Sidewalks and Curbing	520.21		
77. Snow and Ice Removal			
78. Sprinkling			
a. Water	333.63		
b. Other			
79. Lighting			
80. Miscellaneous			
Total from Highways	\$ 2,358.08		\$ 2,358.08
8e. Charities			
81. Almshouse or Town Farm			
a. Sale of Produce and Stock			
b. Board	\$ 4,456.14		
c. Miscellaneous	35.18		
82. Reimbursements for Relief Given			
a. From Individuals	24.48		
b. From Other Cities and Towns	2,094.17		
c. From the State	2,745.03		
Aid			
a. From Individuals			
b. From Other Cities and Towns	840.00		
c. From the State	3,065.34		
84. Municipal General Hospitals			
85. Miscellaneous			
Total from Charities	\$ 13,260.34		\$ 13,260.34
Total forward			\$3,938,776.76

PAYMENTS

OBJECTS OF PAYMENTS	Expenses	Outlays	Total
Total forward			\$1,785,056.40
1d. Highways:			
60. General Administration	\$ 7,231.75		
61. General Highway Ex- penditures	246,147.84		
*62. Construction		\$ 236,400.01	
*63. Sidewalks and Curbing		16,563.34	
64. Snow and Ice Removal	55,130.19		
*65. Sprinkling			
a. Water	17,312.51		
b. Other	22,575.22		
66. Lighting	123,514.54		
67. Other Expenses			
a. Town Pump			
b. Signs, Guide Boards, and Street Numbering			
c.			
Total for Highways	\$ 471,912.05	\$ 252,963.35	\$ 724,875.40
1e. Charities:			
68. General Administration	\$ 6,856.59		
*69. Almshouse or Town Farm ..	101,519.51		
70. Outside Relief by City or Town	34,843.14		
71. Relief given by Other Cities and Towns			
72. Mothers' Aid Relief given by City or Town	73,851.95		
b. Relief given by Other Cities and Towns	448.00		
*73. Municipal General Hospitals			
74. Other Expenses			
Total for Charities	\$ 217,519.19		\$ 217,519.19
Total forward			\$2,727,450.99

*Entries for construction or new equipment should be made in the second column.

RECEIPTS

SOURCES OF RECEIPTS	Revenue for Expenses	Offsets to Outlays	Total
Total forward			\$3,938,776.76
8f. Soldiers' Benefits:			
86. State Aid	\$ 17,733.27		
87. Military Aid	804.00		
88. Soldiers' Burials	210.00		
89. Soldiers' Relief	192.60		
German War	10.00		
Total from Soldiers' Benefits	\$ 18,949.87		18,949.87
8g. Schools:			
90. Tuition and Transportation of State Wards			
91. Other Tuition	\$ 6,512.39		
92. Sale of Text Books and Supplies	66.20		
93. Miscellaneous	103.32		
Vocational School	3,841.59		
New High School		150.00	
Sale Bartlett School Site		3,500.00	
Americanization Classes	4,726.00		
School House Rents	495.00		
School Houses	2.50		
Total from Schools	\$ 15,747.00	\$ 3,650.00	19,397.00
8h. Libraries:			
94. Fines, Rentals, and Sales	\$ 817.05		
95. Miscellaneous			
Total from Libraries	\$ 817.05		817.05
Total forward			\$3,977,940.68

PAYMENTS

OBJECTS OF PAYMENTS	Expenses	Outlays	Total
Total forward			\$2,727,450.99
1f. Soldier's Benefits:			
75. General Administration	\$ 2,683.57		
German War	1,315.50		
76. State Aid	8,224.00		
77. Military Aid	2,131.00		
78. Soldiers' Burials			
79. Soldier's Relief	17,150.30		
Soldiers' Exemption	377.16		
Soldiers' Graves	313.91		
Total for Soldiers' Benefits	\$ 32,195.44		\$ 32,195.44
1g. Schools:			
80. General Expenses Smith Hughes Fund	\$ 3,296.00		
a. Administrative Salaries	4,562.49		
b. Other General Salaries	16,767.13		
c. Other General Expenses ..	20,339.21		
81. Teachers' Salaries	648,586.30		
82. Text Books and Supplies	46,760.20		
83. Tuition			
84. Transportation	3,025.85		
85. Support of Truants	1,197.36		
86. Janitors' Services	100,294.34		
87. Fuel and Light	52,376.73		
88. Maintenance of Buildings and Grounds			
*89. New Buildings		\$ 567,247.44	
*90. Furniture and Furnishings	4,660.69		
91. Rent			
92. Other Expenses	33,305.54		
Textile School	10,000.00		
Total for Schools	\$ 945,171.64	\$ 567,247.44	\$1,512,419.08
1h. Libraries:			
93. Salaries and Wages	\$ 18,947.78		
94. Books, Periodicals, etc.	5,289.63		
95. Binding	1,454.05		
96. Light	892.00		
*97. Buildings			
98. Other Expenses	2,350.28		
Total for Libraries	\$ 28,933.74		\$ 28,933.74
Total forward			\$4,300,999.25

*Entries for construction or new equipment should be made in the second column.

PAYMENTS

OBJECTS OF PAYMENTS	Expenses	Outlays	Total
Total forward			\$4,300,999.25
1i. Recreation:			
99. General Administration			
a. Salaries and Wages	\$ 4,000.00		
b. Other Expenses	222.30		
100. Parks and Gardens			
a. Salaries and Wages	20,443.42		
c. Metropolitan Park Main- tenance			
d. Other Expenses	4,915.05		
101. Playgrounds and Gymnasias ..			
a. Salaries and Wages	2,698.20		
*b. Improvements & Additions			
c. Other Expenses	540.25		
102. Bathhouses and Beaches			
a. Salaries and Wages	868.34		
*b. Improvements & Additions			
c. Other Expenses	2,522.65		
103. Celebrations and Entertain- ments			
a. Fourth of July	1,452.04		
b. Labor Day	1,172.80		
c. Band Concerts	664.00		
d. All Other			
Entertainment Soldiers and Sailors of War	1,438.50		
Veteran Firemen	100.00		
Care Trees			
Salaries and Wages	3,416.07		
Other Expenses	405.94		
Total for Recreation	\$ 44,859.56	\$ 12,320.00	\$ 57,179.56
Total forward			\$4,358,178.81

*Entries for construction or new equipment should be made in the second column.

PAYMENTS

OBJECTS OF PAYMENTS	Expenses	Outlays	Total
Total forward			\$4,358,178.81
1j. Pensions:			
104. Retirement made from:—			
a. Police Department	\$ 7,765.44		
b. Fire Department	7,093.59		
c. Buildings Department	238.37		
d. Street Department	1,882.92		
e. School Department	844.68		
f. Water Works Department	366.00		
g. Department			
h. Department			
i. Department			
j. Department			
k. Department			
l. Department			
Total for Pensions	\$ 18,191.00		\$ 18,191.00
1k. Unclassified:			
105. Damages to Persons and Personal Property			
106. Memorial Day	\$ 1,649.81		
107. City and Town Clocks	50.00		
108. Searching Parties			
109. Ice for Drinking Fountains ..			
110. Payments not Recorded under Previous Classifications			
a. Printing City or Town Reports	1,866.05		
b. Claims	1,892.03		
c. Workman's Compensation	5,526.00		
d. General Expenses	6,388.25		
e. Charter Commission	176.39		
f. Memorial Auditorium		274,251.94	
Total for unclassified	\$ 17,548.53	\$ 274,251.94	\$ 291,800.47
Total forward			\$4,668,170.28

RECEIPTS

SOURCES OF RECEIPTS	Revenue for Expenses	Offsets to Outlays	Total
Total forward			\$3,983,405.25
9. Public Service Enterprises:			
102. Electric			
a. Income from Sale of Light and Power			
b. Miscellaneous			
103. Gas			
a. Income from Sale of Gas			
b. Sale of By-products (coke, tar, etc.)			
c. Miscellaneous			
104. Water			
a. Income from Sale of Water	\$ 349,471.43		
b. Miscellaneous	22,446.95		
105. All Other			
a. Markets			
b. Public Scales	93.25		
c. Docks and Wharves			
d. Ferries			
e. Herring and Alewife Fisheries			
f. Miscellaneous			
Total from Public Service Enterprises	\$ 372,011.63		\$ 372,011.63
10. Cemeteries:			
106. Sale of Lots and Graves	\$ 4,771.50		
107. Care of Lots and Graves	7,692.37		
108. Care of Endowed Lots	17,850.00		
109. Miscellaneous	6,195.15		
Total from Cemeteries	\$ 36,509.02		\$ 36,509.02
11. Administration of Trust Funds:			
110.			
111.			
112.			
Total from Administration of Trust Funds			
Total Forward			\$4,391,925.90

PAYMENTS

OBJECTS OF PAYMENTS	Expenses	Outlays	Total
Total forward			\$4,668,170.28
2. Public Service Enterprises:			
111. Electric			
a. Maintenance and Operation			
*b. Construction			
112. Gas			
a. Maintenance and Operation			
*b. Construction			
113. Water			
a. Maintenance and Operation	\$ 295,412.14		
b. Metropolitan Water Main- tenance			
*c. Construction		\$ 50,739.40	
Water Works Sinking Fund Payment	1,000,000.00		
114. All Other			
a. Markets			
b. Public Scales	1,214.09		
c. Docks and Wharves			
d. Ferries			
e. Herring and Alewife Fisheries			
f. Miscellaneous			
Total for Public Service Enter- prises	\$1,296,626.23	\$ 50,739.40	\$1,347,365.63
3. Cemeteries:			
115. Maintenance	\$ 21,218.50		
*116. Improvements and Additions			
Total for Cemeteries	\$ 21,218.50		\$ 21,218.50
4. Administration of Trust			
117.			
118.			
119.			
Total for Administration of Trust Funds			
Total forward			\$6,036,754.41

*Entries for construction or new equipment should be made in the second column.

RECEIPTS

SOURCES OF RECEIPTS	Revenue for Expenses	Indebtedness	Total
Total forward			\$4,391,925.90
12. Interest:			
113. On Deposits	\$ 12,585.68		
114. On Deferred Taxes	30,054.23		
115. On Deferred Special Assessments			
116. On Sinking Funds			
117. On Investment Funds			
118. On Public Trust Funds*			
a. Charity			
b. School			
c. Library (John Davis)	3,967.01		
d. Cemetery (for General Care) (Stackpole Fund)	45.50		
e. All Other Perpetual Care	14,325.00		
119. Miscellaneous J. Tyler Fund	488.81		
Auditorium Deposits	71.63		
Total from Interest	\$ 61,537.86		\$ 61,537.86
Total Forward			\$4,453,463.76

*Including income of funds invested in real estate.

PAYMENTS

OBJECTS OF PAYMENTS	Expenses	Indebtedness	Total
Total forward			\$6,036,754.41
5. Interest:			
120. On Loans in Anticipation of Revenue	\$ 93,612.33		
121. On Other Temporary Loans ..			
122. On Loans for General Purposes	159,441.50		
123. On Trust Funds Used	200.00		
124. On Loans for Public Service Enterprises	57,173.75		
125. On Loans for Cemeteries			
126. Metropolitan Interest Requirements			
a. Sewer			
b. Park			
c. Water			
127. State Assessment for Interest on Account of Abolition of Grade Crossings			
128. All Other			
Total for Interest	\$ 310,427.58		\$ 310,427.58
Total Forward			\$6,347,181.99

AUDITOR'S REPORT

RECEIPTS

SOURCES OF RECEIPTS	Revenue for Expenses	Indebtedness	Total
Total Forward			\$4,453,463.76
13. Municipal Indebtedness:			
120. Loans in Anticipation of Revenue		\$3,000,000.00	
121. Other Temporary Loans			
122. Loans for General Purposes		1,472,000.00	
123. Trust Funds Used			
124. Loans for Public Service Enterprises		15,000.00	
125. Loans for Cemeteries			
126. Bonds Refunded, Current Year			
127. Premiums		11,558.80	
128. Unpaid Warrants or Orders of Current Year			
Total from Municipal Indebt- ness		\$4,498,558.80	\$4,498,558.80
Total forward			\$8,952,022.56

PAYMENTS

OBJECTS OF PAYMENTS	Expenses	Indebtedness	Total
Total Forward			\$6,347,181.99
6. Municipal Indebtedness:			
129 Loans in Anticipation of Revenue		\$2,600,000.00	
130. Other Temporary Loans			
131. Bonds and Notes from Sinking Funds			
a. General			
b. Public Service Enterprises			
c. Cemeteries			
132. Bonds and Notes from Revenue			
a. General	344,150.00		
b. Public Service Enterprises	63,000.00		
c. Cemeteries			
133. Metropolitan Sinking Fund and S Serial Loan Requirements			
a. Sewer			
b. Park			
c. Water			
134. State Assessment for Abolition of Grade Crossing Loan Fund			
135. Bonds Refunded, Current Year			
136. Warrants or Orders of Previous Years			
Total for Municipal Indebtedness	\$ 407,150.00	\$2,600,000.00	\$3,007,150.00
Total forward			\$9,354,331.99

RECEIPTS

SOURCES OF RECEIPTS		Non- Revenue	Total
Total forward			\$8,952,022.56
14. Sinking Funds:			
<i>From Commissioners to meet Loans for—</i>			
129. General Purposes		\$ 450,000.00	
130. Public Service Enterprises		1,000,000.00	
131. Cemeteries			
Total from Sinking Funds		\$1,450,000.00	\$1,450,000.00
Temporary Accounts			
15. Agency, Trust, and Invest- ment Transactions:			
<i>Agency</i>			
132. Taxes			
a. State			
b. Non-resident Bank			
c. County			
133. Liquor Licenses Collected for the State		\$ 123.79	
134. Reimbursements for Abolition of Grade Crossings			
135. All Other			
<i>Trust</i>			
136. Perpetual Care Funds			
137. Other Permanent Public Trust Funds			
138. Income for Investment			
139. Private Trust Funds and Accounts			
<i>Investment</i>			
140. Sinking Fund Securities			
141. Investment Fund Securities ..			
Total from Agency, Trust, and Investment Transactions		\$ 123.79	\$ 123.79
Total forward			\$10,402,146.35

PAYMENTS

OBJECTS OF PAYMENTS	From Revenue	From Non- Revenue	Total
Total forward			\$9,354,331.99
7. Sinking Funds:			
<i>To Commissioners for Debt Re-</i>			
<i>quirements</i>			
137. From Taxes, Earnings, etc. ..	\$ 75,000.00		
138. From Special Assessments			
130. From Sale of Real Estate, etc.			
Total for Sinking Fund	\$ 75,000.00		\$ 75,000.00
Temporary Accounts			
8. Agency, Trust, and Invest-			
ment Transactions:			
<i>Agency</i>			
Corporation Tax		\$ 1.48	
140. Taxes			
a. State		298,480.00	
b. Non-resident Bank		12,099.40	
c. County		130,781.10	
d. State Portion Poll Tax		79,719.00	
141. Liquor Licenses Remitted to the State		4.00	
142. Abolition of Grade Crossings		2,240.00	
143. All Other			
State Highway		2,694.11	
Bay State Street Railway		4,934.54	
Special Tax—Army and Navy Men		14,071.20	
Improvements—Hale's Brook		69.61	
<i>Trust</i>			
144. Perpetual Care Funds		14,325.00	
145. Other Permanent Public Trust Funds			
146. Income Invested			
147. Private Trust Funds and Accounts			
Tax Titles		298.49	
<i>Investment</i>			
148. Sinking Fund Securities			
149. Investment Fund Securities ..			
Total for Agency, Trust, and Investment Transactions		\$ 559,717.93	\$ 559,717.93
Total forward			\$9,989,049.92

RECEIPTS

SOURCES OF RECEIPTS		Temporary Accounts and Cash Balances	Total
Total forward			\$10,402,146.35
16. Refunds:			
142. Taxes			
143. Licenses			
144. Special Assessments			
145. General Departments		\$ 1,179.92	
146. Public Service Enterprises			
147. Cemeteries			
148. Accrued Interest		4,462.91	
149. All Other			
Total Refunds		\$ 5,642.83	\$ 5,642.83
17. Transfers:			
150. Departmental			
a. from	Various Appropriations		
b. from			
c. from			
d. from			
e. from			
f. from		\$ 18,939.12	
g. from			
h. from			
i. from			
j. from			
Total Transfers		\$ 18,939.12	\$ 18,939.12
18. Balances:			
151. General			
152. Sinking Fund			
153. Investment Fund			
154. Perpetual Care Fund			
155. Other Public Trust Fund			
156. Private Trust Funds and Accounts			
Total Cash on Hand Beginning of Year		\$ 392,658.61	\$ 392,658.61
Grand Total Receipts and Cash on Hand			\$10,819,386.91

PAYMENTS

OBJECTS OF PAYMENTS		Temporary Accounts and Cash Balances	Total
Total forward			\$9,989,049.92
9. Refunds:			
150. Taxes		\$ 2,138.55	
151. Licenses			
152. Special Assessments			
153. General Departments			
154. Public Service Enterprises			
155. Cemeteries			
156. Accrued Interest			
157. All Other			
Total Refunds		\$ 2,138.55	\$ 2,138.55
10. Transfers:			
158. Departmental			
Various Appropriations to—			
a. Fire		\$ 237.50	
b. Charity—O. D. R.		149.08	
c. Purchasing Agent		551.00	
d. Buildings		5,723.54	
e. Sealer		5.93	
f. Charity—Hospital		1,099.64	
g. Engineering		9,612.62	
h. Health Yard		642.51	
i. City Clerk		90.00	
j. Treasurer		90.00	
k. Water Works		250.01	
l. Parks		298.00	
m. Memorial Auditorium		189.29	
Total Transfers		\$ 18,939.12	\$ 18,939.12
11. Balances:			
159. General			
160. Sinking Fund			
161. Investment Fund			
162. Perpetual Care Fund			
163. Other Public Trust Fund			
164. Private Trust Funds and Accounts			
Total Cash on Hand End of Year		\$ 809,259.32	\$ 809,259.32
Grand Total Payments and Cash on Hand			\$10,819,386.91

FINANCIAL STATEMENT

OF THE

CITY OF LOWELL, MASS.

BALANCES

APPROPRIATIONS

CASH RECEIPTS

TRANSFERS

PAYMENTS

From January 1, 1920 to December 31, 1920

REVENUE

Appropriations, Receipts and Payments

1—Commissioner of Public Safety

No.	Revenue Account	Expended	Debit Balance To 1921	Credit Balance To 1921	Balance From 1919	Appropriations From Revenue	Transfers	Cash Receipts	Total Appropriations
1—1	Mayor	\$ 5,629.67		\$ 370.33		\$ 6,000.00			\$ 6,000.00
1—8	Law	5,176.23		23.77		5,200.00			5,200.00
1—15	Insurance	6,965.68				10,000.00		38.89	10,499.37
2—1	Police	307,672.17		3,533.69	\$ 460.48	285,000.00		198.45	285,198.45
2—8	Fish and Game Warden	150.00	\$ 22,473.72			150.00			150.00
2—9	Pound Keeper	5.00				5.00			5.00
3—1	Health Office	40,077.37	1,815.37			38,262.00			38,262.00
3—2	Health Yard	131,861.54	7,187.03			124,000.00	\$ 642.51	32.00	124,674.51
3—3	Smoke Inspection	365.67		34.33		400.00			400.00
3—4	School Inspection	800.00				800.00			800.00
3—5	Inspector Animals	600.00	90.00			510.00			510.00
3—6	Milk Inspection	3,706.44	106.44			3,600.00			3,600.00
3—9	Isolation Hosp'l. Main.	24,635.37		396.00		25,000.00		31.37	25,031.37
5—1	Charity—Hospital	103,812.60		7,287.04		110,000.00	1,099.64		111,099.64
5—2	Charity—O. D. R.	39,495.27	1,280.19			38,000.00	149.08	66.00	38,215.08
5—3	Mothers with Dep't Children	74,299.95		740.05		75,000.00		40.00	75,040.00
6—1	Soldiers' Benefits, Office	2,683.57							
6—2	State Aid	8,224.00		93.63					
6—3	Military Aid	2,131.00				31,380.00		218.00	31,598.00
6—4	Soldiers' Relief	17,150.30							
6—5	German War	1,315.50							
6—6	Soldiers' Graves	313.91		166.09		480.00			480.00
6—7	Soldiers' Exemption	377.16				377.16			377.16
8—2	Band Concerts	664.00		93.00	257.00	500.00			757.00
8—9	Appropriation to pay for entertainment for the Soldiers and Sailors of the War, on July 4, 1919								
		1,438.50		495.50	495.50	1,438.50			1,438.50
14—2	Revision Ordinances								495.50
		\$779,550.90	\$ 32,952.75	\$ 13,233.43	\$ 1,212.98	\$756,102.66	\$ 1,891.23	\$624.71	\$759,831.58

2—Commissioner of Finance

1—3 Auditor	\$ 8,141.45	\$	158.55	\$	8,300.00	\$	8,300.00
1—4 Treasurer	21,573.98		16.02		21,500.00	\$	21,500.00
1—5 Assessors	22,451.05		98.95		22,550.00		22,550.00
1—6 Assessors' Tax Books	2,094.75		5.25	\$	300.00		2,100.00
1—9 City Clerk	11,655.41		134.59		11,700.00		11,790.00
1—12 Election and Registrars	27,570.51		29.49		27,600.00	90.00	27,600.00
1—13 Purchasing Agent	8,398.70		552.30		8,400.00	551.00	8,951.00
1—16 Registrar of Labor	715.63		34.37		750.00		750.00
14—3 Auditing City Books	977.50		22.50		1,000.00		1,000.00
	\$103,578.98	\$	1,052.02	\$1,800.00	\$102,100.00	\$	\$104,631.00

3—Commissioner of Streets and Highways

1—11 Engineering	\$ 18,068.75	\$	43.87	\$	8,500.00	\$	9,612.62
3—8 Sewer Maintenance	21,346.06		153.94		21,500.00		21,500.00
4—1 Street Maintenance	309,880.50		119.50		310,000.00		310,000.00
4—2 Street Sprinkling	39,887.73		130.27		40,000.00	18.00	40,018.00
4—3 Street Lighting	123,514.54		10,342.60		6,007.14		133,857.14
	\$512,697.58	\$	10,790.18	\$6,007.14	\$507,850.00	\$	523,487.76

4—Commissioner of Fire and Water

2—2 Fire	\$338,308.72	\$	8,016.22				\$330,292.50
2—13 Motor Driven Apparatus	18,255.00				\$330,055.00	\$	27,800.00
10—2 Water Works	473,144.41		100,952.32	\$	27,800.00		372,192.09
10—2 Payment and Retirement Water Works Loan (Oct. 30, 1890)	1,000,000.00					250.01	\$371,942.08
					1,000,000.00		1,000,000.00
	\$1,829,708.13	\$	108,968.54	\$	\$1,357,855.00	\$	\$371,942.08
			9,545.00			487.51	\$1,730,284.59

REVENUE—APPROPRIATIONS, RECEIPTS AND PAYMENTS—Continued

j—Commissioner of Public Property and Licenses

No	Revenue Account	Expended	Debit Balance To 1921	Credit Balance To 1921	Balance From 1919	Appropriations From Revenue	Transfers	Cash Receipts	Total Appropriations
1—7	License Commission	\$ 5,539.09		\$ 10.91		\$ 5,550.00			\$ 5,550.00
1—10	City Messenger	1,989.75		10.25		2,000.00			2,000.00
1—14	City Hall	32,050.72		49.28		32,100.00			32,100.00
2—3	Rifle Range	1,483.71		16.29		1,500.00			1,500.00
2—4	Buildings	126,922.53		7.55		121,000.00	\$ 5,723.54	206.54	126,930.08
2—5	Wires	4,636.50		13.50		4,650.00			4,650.00
2—6	Sealer	7,980.33		25.60		8,000.00	5.93		8,005.93
2—7	Moths	8,487.48		12.52		8,500.00			8,500.00
2—10	Weigher	1,214.09		10.91		1,225.00			1,225.00
2—11	Repairing and Reconstructing								
	Laura Lee School	3,300.00				3,300.00			3,300.00
2—12	Waterways	4.68		495.32		500.00			500.00
2—14	Purchasing Land in the Highlands and Constructing Fire Engine House	3,126.80		13,376.81		16,503.61			16,503.61
		9,938.06	338.06			9,600.00			9,600.00
3—7	Comfort Station								
		\$206,673.74	\$ 338.06	\$ 14,028.94		\$214,428.61	\$ 5,729.47	206.54	\$220,364.62

6—Recreation

8—1	Parks	\$ 40,197.72		\$ 2,834.33		\$ 38,000.00	\$ 298.00	\$ 4,734.05	\$ 43,032.05
-----	-------------	--------------	--	-------------	--	--------------	-----------	-------------	--------------

7—School Department

7—1	Schools	\$860,129.34				\$921,000.00		\$41.95	\$921,041.95
7—2	Vocational School	60,698.27		\$ 214.34					
7—3	Textile School	10,000.00				10,000.00			10,000.00
7—4	Sight Saving Classes	184.65		565.35		750.00			750.00
7—5	Smith-Hughes Fund	3,296.00		68.00		3,364.00			3,364.00
		\$934,308.26		\$ 847.69		\$935,114.00		\$ 41.95	\$935,155.95

8—Municipal Council

1— 2	Commissioners	\$ 10,000.00		\$ 10,000.00	\$ 10,000.00
8— 3	Memorial Day, G. A. R.	1,000.00		1,000.00	1,000.00
8— 4	Memorial Day, S. W. V. ..	499.81		500.00	500.00
8— 5	Memorial Day, S. of V.	150.00	\$.19	150.00	150.00
8— 6	July Fourth	405.00		405.00	405.00
8— 8	Labor Day	1,172.80	27.20	1,200.00	1,200.00
14— 1	Claims	4,030.58	597.26	4,622.84	5.00
14— 4	Workmen's Compensation Act	5,526.00	485.43	6,000.00	11.43
14— 6	Appropriation for Payment				
	Certain Accounts	17,270.00		17,270.00	17,270.00
8— 7	Veteran Firemen Association	100.00		100.00	100.00
14— 5	General Expenses	9,304.30	1,700.40	10,756.50	248.20
14— 7	Appropriation for paying ex- penses of commission to pro- vide for an investigation as to advisability of making changes in the Charter of the City of Lowell	176.39	823.61	1,000.00	1,000.00
		\$ 49,634.88	\$ 3,634.09	\$ 53,004.34	\$ 264.63
					\$ 53,268.97

9—Library Trustees

9— 1	Library	\$ 28,390.54	\$ 393.52	\$ 24,000.00	\$ 4,784.06
					\$ 28,784.06

NON-REVENUE APPROPRIATIONS, RECEIPTS AND PAYMENTS—Continued

No.	Revenue Account	Expended	Debit Balance To 1921	Credit Balance To 1921	Balance From 1919	Appropriations From Revenue	Transfers	Cash Receipts	Total Appropriations
11—Cemeteries									
11-1	Cemeteries	\$ 21,218.50		\$ 21,450.50	\$6,114.48			\$36,554.52	\$42,669.00
12—Fixed Charges									
12-1	Interest	\$253,253.83				\$247,000.00			\$253,663.36
12-2	City Debt	344,150.00		\$ 409.53	\$6,663.36	344,150.00			344,150.00
12-3	Sinking Funds	75,000.00				75,000.00			75,000.00
12-4	Payment and Retirement Lowell City Hall and Memorial Building Loan	450,000.00				450,000.00			450,000.00
		\$1,122,403.83		\$ 409.53	\$6,663.36	\$1,116,150.00			\$1,122,813.36
13—Agency, Trust, Investments and Transactions									
13-1	National Bank Tax	\$ 12,099.40		\$ 13.06		\$ 12,112.46			\$ 12,112.46
3-2	Liquor Licenses	4.00				4.00			4.00
3-3	Grade Crossings	2,240.00				2,240.00			2,240.00
13-4	State Tax	298,480.00				298,480.00			298,480.00
13-5	State Highway Tax	2,694.11				2,694.11			2,694.11
13-6	County Tax	130,781.10				130,781.10			130,781.10
13-7	Special Tax, Army and Navy Men	14,071.20				14,071.20			14,071.20
13-8	Improvement Hale's Brook ..	69.61				69.61			69.61
13-9	State Portion Poll Tax	79,719.00		5,271.00		84,990.00			84,990.00
13-10	Bay State Street Ry.	4,934.54				4,934.54			4,934.54
13-11	Corporation Tax	1.48	\$1.48						
		\$545,094.44	\$1.48	\$5,284.06		\$550,377.02			\$550,377.02

NON-REVENUE

Appropriations, Receipts and Payments

3—Commissioner of Public Safety

No.	Non-Revenue Account	Expended	Debit Balance To 1921	Credit Balance To 1921	Balance From 1919	Approp. From Revenue	Approp. From Loans	Transfers	Cash Receipts	Total Appropriations
3— 1	Sewer Construction	\$ 95,438.36		\$ 361.19	\$ 2,790.05		\$ 90,000.00	\$3,000.00	\$ 9.50	\$ 95,799.55
3— 3	Isolation Hospital Equipment and Furnishings	20,012.50		537.79	20,550.29					20,550.29
3— 4	Public Bath and Comfort Station	9,126.83		125.60	9,252.43					9,252.43
		\$124,577.69		\$ 1,024.58	\$32,592.77		\$ 90,000.00	\$3,000.00	\$ 9.50	\$125,602.27

4—Commissioner of Streets and Highways

4— 1	Paving	\$ 77,894.18		\$ 2,105.82			\$80,000.00			\$ 80,000.00
4— 2	Macadamizing	62,663.04		32.91	\$ 2,695.95		60,000.00			62,695.95
4— 3	New Sidewalks	16,563.34		7.42	570.76		16,000.00			16,570.76
4— 4	Bridge Construction	78,317.19		15,725.18	2,042.37		92,000.00			94,042.37
4— 5	Construction and Extension of First Street	11,076.08		12,004.05	23,080.13					23,080.13
4— 6	Widening Locke Street	6,449.52		6,185.25		634.77	12,000.00			12,634.77
		\$252,963.35		\$ 36,060.63	\$28,389.21	\$634.77	\$260,000.00			\$289,023.98

NON-REVENUE—APPROPRIATIONS, RECEIPTS AND PAYMENTS

7—School Department

No.	Non-Revenue Account	Expended	Debit Balance To 1921	Credit Balance To 1921	Balance From 1919	Appro From Revenue	Appro Loans	Transfers	Cash Receipts	Total Appropriations
7— 1	Acquiring Land and Constructing New High School	\$453,532.19		\$1,322,039.86	\$ 25,572.05		\$1,750,000.00			\$1,775,572.05
7— 2	Acquiring Land and Constructing Schools	101,721.08		22,319.40	124,040.48					124,040.48
7— 3	Acquiring Land Construction School Houses (year 1920)	8,694.17		1,305.83			10,000.00			10,000.00
		\$563,947.44		\$1,345,665.09	\$149,612.53		1,760,000.00			\$1,909,612.53

8—Recreation

8— 1	Land for Public Parks	\$ 12,320.00				\$320.00	\$ 12,000.00			\$ 12,320.00
------	-----------------------------	--------------	--	--	--	----------	--------------	--	--	--------------

10—Commissioner of Fire and Water

10— 1	Extension Water Mains and Departmental Equipment ...	\$ 50,419.15		\$ 16,782.31	\$52,201.46		\$ 15,000.00			\$ 67,201.46
10— 2	Acquiring Land and Protecting Water Supply	320.25		3,463.51	3,783.76					3,783.76
		\$ 56,739.40		\$ 20,245.82	\$55,985.22		\$ 15,000.00			\$ 70,985.22

14—Unclassified

14— 1	Municipal Purposes			\$ 1,625.02	\$ 1,625.02					\$ 1,625.02
14— 2	Lowell Mem. Auditorium ...	\$274,441.23		611,119.66	\$24,888.97		\$860,000.00	\$ 189.29	\$482.63	\$85,560.89
		\$274,441.23		\$612,744.68	\$26,513.99		\$860,000.00	\$ 189.29	\$482.63	\$887,185.91

RECAPITULATION January 1 — December 31, 1920 REVENUE ACCOUNT

N.º.	Expended	Debit Balance To 1921	Credit Balance To 1921	Balance From 1919	Appropriations From Revenue	Appropriations From Loans	Transfers	Cash Receipts	Total Appropriations
1.	Public Safety	\$ 779,550.90	\$ 32,952.75	\$ 13,233.43	\$ 1,212.98	\$ 756,102.66	\$ 1,891.23	\$ 624.71	\$ 759,831.58
2.	Finance	103,578.98		1,052.02	1,800.00	102,100.00	731.00		104,631.00
3.	Streets & Highways	512,697.58		10,790.18	6,007.14	507,850.00	9,612.62	18.00	523,487.76
4.	Fire and Water	1,829,708.13	108,968.54	9,545.00		1,357,855.00	487.51	371,942.08	1,730,284.59
5.	Public Property	206,673.74	338.06	14,028.94		214,428.61	5,729.47	206.54	220,364.62
6.	Recreation	40,197.72		2,834.33		38,000.00	298.00	4,734.05	43,032.05
7.	Schools	934,308.26		847.69		935,114.00		41.95	935,155.95
8.	Municipal Council	49,634.88		3,634.09		53,004.34		264.63	53,268.97
9.	Library Trustees	28,390.54		393.52		24,000.00		4,784.06	28,784.06
11.	Cemeteries	21,218.50		21,450.00	6,114.48			36,554.52	42,669.00
12.	Fixed Charges	1,122,403.83		409.53	6,663.36	1,116,150.00			1,122,813.36
13.	Agency, Trust In-vestments, Transac-tions	545,094.44	1.48	5,284.06		550,377.02			550,377.02
		\$6,173,457.50	\$142,260.83	\$ 83,503.29	\$ 21,797.95	\$5,654,981.63	\$18,749.83	\$419,170.54	\$6,114,699.96

NON-REVENUE ACCOUNT

3.	Public Safety	\$ 124,577.69	\$ 1,024.58	\$32,592.77	\$	90,000.00	\$ 3,000.00	\$ 9.50	\$ 125,602.27
4.	Streets & Highways	252,963.35	36,060.63	28,389.21	\$634.77	260,000.00			289,023.98
7.	Schools	563,947.44	1,345,665.09	149,612.53		1,760,000.00			1,909,612.53
8.	Recreation	12,320.00			320.00	12,000.00			12,320.00
10.	Fire and Water	50,739.40	20,245.82	55,985.22		15,000.00			70,985.22
14.	Unclassified	274,441.23	612,744.68	26,513.99		860,000.00	189.29	482.63	887,185.91
		\$1,278,989.11	\$2,015,740.80	\$293,093.72	\$954.77	\$2,997,000.00	\$ 3,189.29	\$ 492.13	\$3,294,729.91

CLASSIFICATION OF

**EXPENSES
REVENUE**

DEPARTMENTAL

.

MAYOR'S DEPARTMENT

Appropriation	\$ 6,000.00	
	<hr/>	\$ 6,000.00

Expended

Salaries :

To Perry D. Thompson,

Commissioner of Public Safety	\$ 3,000.00
George F. Toye, Secretary	1,081.91
Alice E. Kelley, Temp. Secretary	62.50
Arthur F. Woodies, Secretary	913.33

Other Expenses :

For Office Supplies	187.36
Printing, Binding	6.00
Telephone	43.29
Transfers	27.00
Transportation	102.91
All Other	205.37

	<hr/>	\$ 5,629.67
Returned to Treasury		370.33
	<hr/>	\$ 6,000.00

COMMISSIONERS

Appropriation	\$ 10,000.00	
	<hr/>	\$ 10,000.00

Expended

Salaries :

To Commissioners	\$ 10,000.00	
	<hr/>	\$ 10,000.00

AUDITING DEPARTMENT

Appropriation	\$ 8,300.00	
	<hr/>	\$ 8,300.00

Expended

Salaries:		
To J. Joseph Hennessy, Auditor	\$	3,209.86
Clerks		4,371.98
Other Expenses:		
For Office Supplies	\$	120.41
Printing, Binding, etc.		290.75
Telephone		51.15
Transfers		8.00
All Other		89.30
	<hr/>	\$ 8,141.45
Returned to Treasury		158.55
		<hr/>
		\$ 8,300.00

TREASURER AND COLLECTOR'S DEPARTMENT

Appropriation	\$ 21,000.00	
	<hr/>	\$ 21,596.00

Expended

Salaries:		
To Fred H. Rourke, Treasurer and Collector	\$	3,211.97
Clerks		12,613.89
Writing and Distributing Tax Bills		267.84
Other Expenses:		
For Advertising		96.48
Office Supplies		1,189.73
Postage Stamps		1,404.20
Premiums on Bonds		700.00
Printing, Binding, etc.		1,321.28
Telephone		51.63
Transportation		249.00
All Other		467.96
	<hr/>	\$ 21,573.98
Returned to Treasury		16.02
		<hr/>
		\$ 21,590.00

ASSESSORS' DEPARTMENT

Appropriation	\$ 22,550.00	
	<hr/>	\$ 22,550.00

Expended

Salaries :

To Albert J. Blazon, Assessor	\$ 2,809.25
Daniel E. Hogan, Assessor	2,809.25
Jeremiah J. O'Sullivan, Assessor	2,809.25
Permanent Clerks	4,468.00
Temporary Clerks	6,478.88
Assistant Assessors	1,744.77

Other Expenses :

For Advertising	187.80
Automobile Supplies, Repairs	464.94
Office Supplies	78.83
Printing, Binding, etc.	289.96
Telephone	12.05
Transportation	48.37
Transfers	30.00
All Others	219.70
	<hr/>
	\$ 22,451.05

Returned to Treasury	98.95
----------------------------	-------

\$ 22,550.00

ASSESSORS' TAX BOOKS

Appropriation	\$ 2,100.00	
	<hr/>	\$ 2,100.00

Expended

Other Expenses :

For Printing Tax Books	\$ 2,094.75
	<hr/>
	\$ 2,094.75

Returned to Treasury	5.25
----------------------------	------

\$ 2,100.00

LICENSE COMMISSION

Appropriation	\$ 5,550.00	
	<u> </u>	\$ 5,550.00

Expended

Salaries and Wages :

To C. H. Hanson, License Commissioner	\$ 903.81
George E. Putnam, License Commissioner	853.53
J. H. McGrath, License Commission	853.53
Clerk	2,333.16
Temporary Clerk	364.00

Other Expenses :

For Office Supplies	18.70
Printing, Binding	142.50
Telephone	20.60
All Other	49.26

	<u> </u>	\$ 5,539.09
Returned to Treasury		10.91
		<u> </u>
		\$ 5,550.00

LAW DEPARTMENT

Appropriation	\$ 5,200.00	
	<u> </u>	\$ 5,200.00

Expended

Salaries :

To William D. Regan	\$ 3,215.25
Clerk	1,265.00

Other Expenses :

For Books	123.90
Office Supplies	251.81
Printing and Binding	116.75
Telephone	63.66
Transfers	10.00
All Other	129.86

	<u> </u>	\$ 5,176.23
Returned to Treasury		23.77
		<u> </u>
		\$ 5,200.00

CITY CLERK'S DEPARTMENT

Appropriation	\$ 11,790.00	
	<hr/>	\$ 11,790.00

Expended

Salaries and Wages:

To Stephen Flynn, City Clerk	\$ 2,812.62
Wm. P. McCarthy, Assistant City Clerk	2,415.00
Clerks	4,636.88

Other Expenses:

For Advertising	26.23
Birth Returns	990.85
Office Supplies	271.72
Printing and Binding	354.50
Telephone	15.00
All Other	132.61

	<hr/>	\$ 11,655.41
Returned to Treasury		134.59
		<hr/>
		\$ 11,790.00

CITY MESSENGER'S DEPARTMENT

Appropriation	\$ 2,000.00	
	<hr/>	\$ 2,000.00

Expended

Salaries:

To Owen A. Monahan	\$ 1,894.65
Other Expenses	59.45
Printing and Binding	9.00
Telephone	12.65
Transfers	14.00

	<hr/>	\$ 1,989.75
Returned to Treasury		10.25
		<hr/>
		\$ 2,000.00

ENGINEERING DEPARTMENT

Appropriation	\$ 18,112.62	
		\$ 18,112.62
Expended		
Salaries and Wages :		
To Stephen Kearney, City Engineer	\$ 3,013.06	
Clerk	1,252.48	
All Other Service	13,128.59	
Other Expenses :		
For Office Supplies	316.11	
Printing and Binding	57.18	
Telephone	29.70	
Transfers	4.00	
All Other	267.63	
		\$ 18,068.75
Returned to Treasury		43.87
		\$ 18,112.62

ELECTIONS AND REGISTRATION

Appropriation	\$ 27,600.00	
		\$ 27,600.00
Expended		
Salaries and Wages :		
To H. C. McOskey, Registrar of Voters	\$ 1,003.26	
J. O. Allard, Registrar of Voters	904.09	
F. Harrison, Registrar of Voters	904.09	
J. H. Maguire, Registrar of Voters	697.13	
Precinct Officers	10,459.00	
Registrars' Assistants	4,311.15	
All Other	5,601.99	
Other Expenses :		
For Advertising	341.86	
Equipment, Hardware, Etc.	692.34	
Miscellaneous	207.30	
Office Supplies	422.56	
Printing and Binding	711.50	
Teaming	907.50	
Telephones	45.90	
Transfers	246.64	
All Other	114.20	
		\$ 27,570.51
Returned to Treasury		29.49
		\$ 27,600.00

PURCHASING DEPARTMENT

Appropriation	\$ 8,951.00	
		\$ 8,951.00

Expended**Salaries:**

To Edward H. Foye	\$ 2,611.91
Inspector	1,555.00
Clerks	2,634.94

Other Expenses:

For Advertising	33.80
Automobile, Supplies, Repairs	3.10
Office Supplies	1,012.55
Printing, Binding, Etc.	279.83
Telephone	26.10
All Other	241.47

	\$ 8,398.70
Returned to Treasury	552.30

\$ 8,951.00

CITY HALL DEPARTMENT

Appropriation	\$ 32,100.00	
		\$ 32,100.00

Expended**Wages:**

To Janitors	\$ 4,442.00
Engineers and Firemen	6,891.55
Elevator Service	1,461.95
Matrons	4,835.25

Other Expenses:

For Fuel	8,702.37
Furniture and Fittings	1,356.97
Janitors' Supplies	607.53
Laundry	248.98
Light	2,069.66
Miscellaneous	596.70
Water	487.42
All Other	350.34

	\$ 32,050.72
Returned to Treasury	49.28

\$ 32,100.00

INSURANCE

Appropriation	\$ 10,499.37	
	<hr/>	\$ 10,499.37

Expended

To Various Persons and Firms	\$ 6,965.68	
	<hr/>	\$ 6,965.68
Returned to Treasury		3,533.69
		<hr/>
....		\$ 10,499.37

REGISTRAR OF LABOR

Appropriation	\$ 750.00	
	<hr/>	\$ 750.00

Expended

Salary :		
To Patrick J. Reynolds	\$ 701.63	
Other Expenses :		
For Printing	14.00	
	<hr/>	\$ 715.63
Returned to Treasury		34.37
		<hr/>
		\$ 750.00

REVENUE

PROTECTION PERSONS AND
PUBLIC PROPERTY

AUDITOR'S REPORT

POLICE DEPARTMENT

Appropriation	\$285,198.45	
	<hr/>	\$285,198.45

Expended

Salaries and Wages:

To Redmond Welch, Chief of Police	\$ 3,000.00
All Other Salaries and Wages	280,105.09

Other Expenses:

For Auto, Care, Supplies	8,158.20
Coal and Wood	1,666.44
Gas and Electricity	689.50
Hay, Grain, Etc.	316.01
Harnesses, Stable Supplies, Etc.	113.44
Janitors' Supplies	713.16
Laundry	58.82
Motorcycle, Care, Supplies	2,280.00
Office Supplies, Printing	1,256.75
Pensions	7,765.44
Prisoners, Care and Transportation	12 11
Shoeing	53.50
Telephone	171.75
Transfers	25.62
Water	206.95
All Other Supplies	801.37
All Other Expenses	278.02

	<hr/>	\$307,672.17
*Debit Balance		22,473.72
		<hr/>
		\$285,198.45

*This Debit Balance to be provided for by the tax levy of 1921, pursuant to Sec. 16, Chap. 719, Acts 1913.

AUDITOR'S REPORT

69

FIRE DEPARTMENT

Appropriation	\$330,292.50	
		<u>\$330,292.50</u>

Expended

Salaries and Wages:		
To Edward F. Saunders	\$ 3,010.88	
All Other Salaries and Wages	298,821.19	
Other Expenses:		
Equipment and Repairs:		
For Hose and Fittings	\$ 110.27	
All Other Expenses	1,303.76	
Horses and Care of Same:		
For Hay, Grain, Straw, Etc.	6,373.94	
Shoeing	1,029.63	
Stable Supplies, Harnesses, Etc.	1,580.24	
Main Buildings and Grounds:		
For Coal and Wood	6,607.22	
Gas and Electricity	3,002.48	
Laundry	748.79	
Other Expenses		
For Automobile, Repairs and Supplies	3,483.39	
Fire Alarm Boxes	42.20	
Insurance	544.86	
Office Supplies and Printing	332.21	
Pensions	7,093.59	
Telephone	275.41	
Transfers	5.62	
Various Other Supplies	2,355.39	
Water	827.21	
All Other Expenses	760.44	
		<u>\$338,308.72</u>
*Debit Balance		8,016.22
		<u>\$330,292.50</u>

*This Debit Balance to be provided for by the tax levy of 1921, pursuant to Sec. 16, Chap. 719, Acts 1913.

RIFLE RANGE DEPARTMENT

Appropriation	\$ 1,500.00	
		\$ 1,500.00
Expended		
Salary:		
To Raymond Eastman, Keeper	\$ 1,245.86	
Temporary Clerk	53.00	
Other Expenses:		
For Telephone	58.08	
All Other	126.77	
		\$ 1,483.71
Returned to Treasury		16.29
		\$ 1,500.00

INSPECTION BUILDINGS

Appropriation	\$126,930.08	
		\$126,930.08
Expended		
Salaries and Wages:		
To Francis A. Connor, Supt. Public Buildings	\$ 2,395.62	
All Other Salaries and Labor	76,099.52	
Other Expenses:		
For Automobile, Supplies and Repairs	3,749.70	
Electrical Work and Supplies	1,878.34	
Fuel, Light and Power	456.82	
Furniture and Furnishings	427.22	
Hardware	1,993.38	
Harnesses, Stable, Supplies, Etc.	1,416.93	
Hay, Grain, Etc.	177.55	
Lumber	5,256.01	
Mason Work and Supplies	1,600.16	
Office Supplies and Printing	1,329.45	
Paints, Oils, Glass, Etc.	3,827.64	
Pensions	238.37	
Pipe Fittings, Heating, Plumbing, Etc.	20,547.39	
Roofing	3,413.02	
Shoeing	170.85	
Telephone	48.75	
Transfers	198.29	
Various Other Supplies	1,168.26	
Water	91.60	
All Other Expenses	437.66	
		\$126,922.53
Returned to Treasury		7.55
		\$126,930.08

INSPECTION WIRES

Appropriation	\$ 4,650.00	
	<hr/>	\$ 4,650.00
Expended		
Salaries :		
To William H. Mahan, Inspector Wires	\$ 1,935.48	
All Other Services	1,297.38	
Other Expenses :		
For Automobile, Supplies, Repairs	982.61	
Office Supplies and Printing	140.25	
Telephone	23.60	
Transfers	58.08	
Transportation, Car Fares	50.00	
All Other Supplies	149.10	
	<hr/>	\$ 4,636.50
Returned to Treasury		13.50
		<hr/>
		\$ 4,650.00

SEALER WEIGHTS AND MEASURES

Appropriations	\$ 8,005.93	
	<hr/>	\$ 8,005.93
Expended		
Salaries :		
To Warren P. Riordan, City Sealer	\$ 1,994.49	
All Other Service	4,528.90	
Other Expenses :		
For Advertising	33.67	
Equipment	622.63	
Office Supplies, Printing	84.42	
Telephone	72.35	
Transfers	375.50	
Transportation	93.15	
Various Other Supplies	90.13	
All Other Expenses	85.09	
	<hr/>	\$ 7,980.33
Returned to Treasury		25.60
		<hr/>
		\$ 8,005.93

FORESTRY—MOTH EXTERMINATION

Appropriation	\$ 8,500.00	
	<hr/>	\$ 8,500.00
Expended		
Salaries and Wages:		
To John G. Gordon	\$ 1,925.19	
All Other Service	4,761.05	
Other Expenses:		
For Advertising	45.11	
Arsenate of Lead	851.40	
Equipment, Hardware, Repairs, Etc.	363.28	
Office Supplies, Printing, Etc.	39.35	
Transfers	144.10	
Transportation	123.35	
All Other Expenses	234.65	
	<hr/>	\$ 8,487.48
Returned to Treasury		12.52
		<hr/>
		\$ 8,500.00

FISH AND GAME WARDENS

Appropriation	\$ 150.00	
	<hr/>	\$ 150.00
Expended		
Salaries:		
To Harry Gonzales	\$ 100.00	
Elmer H. Houghton	50.00	
	<hr/>	\$ 150.00

POUND KEEPER

Appropriation	\$ 5.00	
	<hr/>	\$ 5.00
Expended		
Salary:		
To A. B. Humphrey	\$ 5.00	
	<hr/>	\$ 5.00

CITY WEIGHER

Appropriation	\$ 1,225.00	
	<u> </u>	\$ 1,225.00

Expended

Salaries:

To George F. Noonan	\$ 863.39
George Enwright	334.42

Other Expenses:

For Office Supplies and Printing	16.28
	<u> </u>

Returned to Treasury		10.91
----------------------------	--	-------

	<u> </u>	\$ 1,225.00
--	-------------------	-------------

REPAIRING AND RECONSTRUCTING LAURA LEE SCHOOL

Appropriation	\$ 3,300.00	
	<u> </u>	\$ 3,300.00

Expended

Other Expenses:

For Plumbing	\$ 3,300.00
	<u> </u>

	\$ 3,300.00
--	-------------

WATERWAYS

Appropriation	\$ 500.00	
	<u> </u>	\$ 500.00

Expended

Other Expenses:

For Transfers	\$ 4.68
	<u> </u>

Returned to Treasury		495.32
----------------------------	--	--------

	<u> </u>	\$ 500.00
--	-------------------	-----------

MOTOR DRIVEN APPARATUS

Appropriation	\$ 27,800.00	
	<u> </u>	\$ 27,800.00

Expended

Other Expenses :		
For Motor Driven Apparatus	\$ 18,255.00	
	<u> </u>	\$ 18,255.00
Continued in Appropriation		9,545.00
		<u> </u>
		\$ 27,800.00

**PURCHASING LAND IN THE HIGHLANDS AND CONSTRUCTING
FIRE ENGINE HOUSE.**

Appropriation	\$ 16,503.61	
	<u> </u>	\$ 16,503.61

Expended

Other Expenses :		
For Land	\$ 3,092.30	
Services	32.00	
All Other Expenses	2.50	
	<u> </u>	\$ 3,126.80
Continued in Appropriation		13,376.81
		<u> </u>
		\$ 16,503.61

REVENUE

Health and Sanitation

HEALTH OFFICE

Appropriation	\$ 38,262.00
	<u> </u> \$ 38,262.00

Expended

Salaries and Wages :

To P. Brunelle, T. F. Carroll, J. E. Drury—	
Board of Health	\$ 2,104.89
Francis J. O'Hare, Agent	2,306.33
All Other Service	19,437.90

Other Expenses :

For Automobile, Repairs, Supplies	1,898.00
Bacteriologist	1,000.00
Board and Treatment	5,863.78
Dry Goods, Clothing, Etc.	55.84
Drugs, Medicine, Etc.	1,290.65
Groceries and Provisions	1,698.51
Medical Attendance	687.87
Office Supplies, Printing, Etc.	933.97
Telephone	72.90
Transfers	1,318.31
Transportation, Traveling Expenses	770.75
Various Other Supplies	48.18
All Other Expenses	589.49

	<u> </u> \$ 40,077.37
*Debit Balance	1,815.37
	<u> </u> \$ 38,262.00

*This Debit Balance to be provided for by the tax levy of 1921, pursuant to Sec. 16, Chap. 719, Acts 1913.

REFUSE AND GARBAGE

Appropriation	\$124,674.51	
	<hr/>	\$124,674.51
Expended		
Wages :		
To Labor	\$102,816.94	
Other Expenses :		
For Fuel	123.00	
Hardware, Blacksmiths' Supplies	1,384.58	
Harnesses, Stable Supplies, Etc.	950.65	
Hay, Grain, Etc.	22,868.22	
Hire Horses, Teaming, Etc.	2,343.00	
Laundry	675.00	
Lighting	214.47	
Water	201.27	
All Other Expenses	284.41	
	<hr/>	\$131,861.54
*Debit Balance		7,187.03
		<hr/>
		\$124,674.51

*This Debit Balance to be provided for by the tax levy of 1921, pursuant to Sec. 16, Chap. 619, Acts 1913.

SMOKE INSPECTION

Appropriation	\$ 400.00	
	<hr/>	\$ 400.00
Expended		
Salary :		
To Charles J. Riley	\$ 351.35	
Other Expenses :		
For Transportation	10.00	
All Other Expenses	4.32	
	<hr/>	\$ 365.67
Returned to Treasury		34.33
		<hr/>
		\$ 400.00

INSPECTION SCHOOL CHILDREN

Appropriation	\$ 800.00	
	<hr/>	\$ 800.00
Expended		
Salaries :		
To Various Physicians	\$ 800.00	
	<hr/>	\$ 800.00

INSPECTION ANIMALS

Appropriation	\$ 500.00	
	<u> </u>	\$ 500.00

Expended

Salary:

To Dr. W. A. Sherman, Inspector of Animals	\$ 500.00	
	<u> </u>	\$ 500.00

INSPECTION MILK AND VINEGAR

Appropriation	\$ 3,600.00	
	<u> </u>	\$ 3,600.00

Expended

Salaries:

To Melvin F. Master, Inspector of Milk and Vinegar	\$ 2,070.00
Collector	1,294.20

Other Expenses:

For Chemical Equipment and Supplies	159.32
Office Supplies and Printing	37.75
Telephone	59.50
Transportation, Traveling Expenses	61.67
All Other	24.00

	<u> </u>	\$ 3,706.44
*Debit Balance		106.44
		<u> </u>
		\$ 3,600.00

*This Debit Balance to be provided for by tax levy of 1921 pursuant to Sec. 16, Chap. 719, Acts of 1913.

COMFORT STATION

Appropriation	\$ 9,600.00	
	<hr/>	\$ 9,600.00

Expended

Wages:		
To Labor	\$ 8,284.92	
Other Expenses:		
For Fuel and Light	482.85	
Janitors' Supplies	543.00	
Various Other Supplies	124.20	
Water	342.84	
All Other Expenses	160.25	
	<hr/>	\$ 9,938.06
*Debit Balance		338.06
		<hr/>
		\$ 9,600.00

*This Debit Balance to be provided for by the tax levy of 1921 pursuant to Sec. 16, Chap. 719, Acts 1913.

SEWER MAINTENANCE

Appropriation	\$ 21,500.00	
	<hr/>	\$ 21,500.00

Expended

Wages:		
To Labor	\$ 20,028.48	
Other Expenses:		
For Equipment, Hardware, Etc.	\$ 888.49	
Fuel and Lighting	196.15	
Hay, Grain, Etc.	63.84	
Various Other Supplies	120.03	
All Other Expenses	49.07	
	<hr/>	\$ 21,346.06
Returned to Treasury		153.94
		<hr/>
		\$ 21,500.00

ISOLATION HOSPITAL

Appropriation	\$ 25,031.37	
	<hr/>	\$ 25,031.37

Expended

Salaries and Wages :

To Forster H. Smith, Superintendent	\$ 1,800.00
---	-------------

Labor	11,997.04
-------------	-----------

Other Expenses :

For Drugs, Medicine, Etc.	101.26
--------------------------------	--------

Fuel, Light and Power	6,356.36
-----------------------------	----------

Groceries and Provisions	2,937.81
--------------------------------	----------

Hardware, Equipment, Etc.	546.16
--------------------------------	--------

Laundry	271.99
---------------	--------

Office Supplies, Printing, Etc.	233.70
--------------------------------------	--------

Telephone	47.22
-----------------	-------

Transfers	10.00
-----------------	-------

Various Other Supplies	116.98
------------------------------	--------

All Other Expenses	216.85
--------------------------	--------

	<hr/>	\$ 24,635.37
Returned to Treasury		396.00

	<hr/>	\$ 25,031.37
--	-------	--------------

REVENUE

Highways and Bridges

HIGHWAYS

Appropriations	\$310,000.00	
	<hr/>	\$310,000.00
Expended		
Salaries and Wages:		
To John B. Blessington, Supt. of Streets	\$ 2,610.88	
Clerical Service and Labor	248,787.96	
Other Expenses:		
For Automobile Repairs and Supplies	6,040.78	
Concrete, Tar, Oils and Asphalt	646.61	
Equipment, Hardware, etc.	13,245.45	
Fibre	590.87	
Fuel	205.41	
Granite	850.36	
Harnesses, Stable Supplies, etc.	152.83	
Hay, Grain, etc.	27,493.80	
Horse Medicine, Veterinary Service	189.86	
Insurance	275.35	
Lime, Brick and Cement	74.29	
Lighting	453.46	
Lumber	838.98	
Office Supplies, Printing and Binding	590.80	
Pensions	1,882.92	
Teaming, Use of Horses and Autos	928.45	
Telephone	136.41	
Transfers	2,040.95	
Transportation and Traveling Expenses	339.61	
Various Other Supplies	297.57	
Water	807.90	
All Other Expenses	399.00	
	<hr/>	\$309,880.50
Returned to Treasury		119.50
		<hr/>
		\$310,000.00

STREET LIGHTING

Appropriation	\$133,857.14	
	<hr/>	\$133,857.14

Expended

Other Expenses:		
For Electrical Lighting	\$ 88,713.71	
Gas Lighting	34,800.83	
	<hr/>	\$123,514.54
Returned to Treasury		10,342.60
		<hr/>
		\$133,857.14

STREET SPRINKLING

Appropriation	\$ 40,018.00	
	<hr/>	\$ 40,018.00

Expended

Wages:		
To Labor	\$ 8,271.21	
Other Expenses:		
For Hardware, Equipment, etc.	105.87	
Oil and Applying Oil	15,507.27	
Transfers	377.81	
Use of Track, Power and Street Sprinkler	12,512.51	
Water	2,800.00	
All Other Expenses	313.06	
	<hr/>	\$ 39,887.73
Returned to Treasury		130.27
		<hr/>
		\$ 40,018.00

REVENUE

Charities

CHARITY—CHELMSFORD ST. HOSPITAL

Appropriation	\$111,099.64	
	<hr/>	\$111,099.64

Expended

Salaries and Wages:

To Michael A. Tighe, M. D., City Physician	\$ 1,404.77
All Other Service	25,711.49

Other Expenses:

For Drugs, Chemicals, Etc.	1,046.45
Dry Goods, Clothing, Etc.	6,875.79
Equipment, Hardware, Etc.	2,287.17
Furniture	130.00
Groceries, Provisions, etc.	49,382.21
Hay, Grain, Straw, Etc.	4,845.73
Horse Shoeing	276.75
Office Supplies, Printing, Etc.	108.29
Power, Fuel and Light	8,107.57
Telephone	35.87
Transfers	660.51
Transportation	117.97
Various Other Supplies	259.49
Water	1,792.41
All Other Expenses	870.13

	<hr/>	\$103,812.60
Returned to Treasury		7,287.04
		<hr/>
		\$111,099.64

CHARITY—OUTSIDE RELIEF

Appropriation	\$ 38,215.08	
	<hr/>	\$ 38,215.08

Expended

Salaries and Wages :

To Martin F. Conley, Superintendent	\$ 2,207.62
Various Physicians	2,242.57
All Other Service	7,492.22

Other Expenses :

For Ambulance Service, Insurance	5,162.86
Auto Repairs and Supplies	561.76
Burials	82.00
Cash Allowance	13,116.14
Coal and Wood	1,951.55
Groceries and Provisions	93.00
Medicines and Medical Attendance	1,429.59
Office Supplies and Printing	475.68
Outside Relief, City :	
State Institutions	1,833.69
Other Institutions	1,704.98
Relief, Other Cities :	
Cities	265.50
Transfers	307.40
Transportation	97.95
Various Other Supplies	355.41
All Other Expenses	115.35

	<hr/>	\$ 39,495.27
*Debit Balance		1,280.19
	<hr/>	\$ 38,215.08

*This Debit Balance to be provided for by the tax levy for 1921 pursuant to Sec. 16, Chap. 719, Acts of 1913.

MOTHERS—DEPENDENT CHILDREN

Appropriation	\$ 75,040.00	
	<hr/>	\$ 75,040.00

Expended

Other Expenses :

For Board and Care	\$ 373.50	
Burials	24.00	
Mothers with Dependent Children	72,967.67	
Outside Aid	448.00	
Physicians	373.75	
Transfers	8.00	
All Other Expenses	105.03	
	<hr/>	\$ 74,299.95
Returned to Treasury		740.05
		<hr/>
		\$ 75,040.00

REVENUE

Soldiers' Benefits

Appropriation	\$ 31,598.00	
	\$ 31,598.00	

Expended

Salaries :		
To William A. Arnold, Supt. State Aid	\$ 1,401.00	
All Other Service	1,150.00	
Other Expenses :		
For Office Supplies, Printing	54.15	
Telephone	2.50	
Transfers	16.00	
All Other Expenses	59.92	
State Aid :		
To Various Persons	8,224.00	
Military Aid		
To Various Persons	2,131.00	
Soldiers' Relief :		
For Aid (Various Persons)	12,917.00	
Burials	240.00	
Fuel	332.69	
Groceries and Provisions	2,406.59	
Medicine and Medical Attendance	1,062.00	
Transfers	34.25	
Transportation	38.22	
All Other Expenses	119.55	
German War :		
Aid to Various Persons	1,315.50	
	\$ 31,504.37	
Returned to Treasury		93.63
		\$ 31,598.00

SOLDIERS' GRAVES

Appropriation	\$ 480.00	
	<u> </u>	\$ 480.00

Expended

Other Expenses :

For Expenses	\$ 313.91	
	<u> </u>	\$ 313.91

Returned to Treasury		166.09
		<u> </u>
		\$ 480.00

SOLDIERS' EXEMPTION

Appropriation	\$ 377.16	
	<u> </u>	\$ 377.16

Expended

To the Commonwealth of Massachusetts	\$ 377.16	
	<u> </u>	\$ 377.16

REVENUE

Education

SCHOOL DEPARTMENT

Appropriation	\$921,041.95	
	<hr/>	\$921,041.95

Expended

Salaries and Wages :

To Hugh J. Molloy, Supt. of Schools	\$ 4,562.49
All Other Salaries and Labor	733,552.15

Other Expenses :

For Advertising	26.20
Automobile, Supplies and Repairs	4,508.32
Board of Truants Training School	1,197.36
Drugs and Chemicals	1,447.83
Fuel and Light	49,770.48
Furniture and Furnishings'	4,660.79
Hardware and Equipment	8,673.90
Insurance	432.34
Laundry	1,596.02
Lumber	2,179.09
Office Supplies	2,578.01
Paper, Pens, Pencils	13,742.04
Pensions	844.68
Provisions	1,025.39
Printing	3,275.05
Rental St. Anne's Parish House	648.00
Rental Theatre	325.00
Telephone	969.84
Text and Reference Books	7,983.56
Transportation	3,229.01
Transfers	2,762.62
Various Other Supplies	3,335.99
Water	3,330.37
All Other Expenses	3,472.81

Vocational School :

Salaries and Wages :

To Various Persons	48,387.34
--------------------------	-----------

Other Expenses :

For Electrical Supplies, Machinery, Tools and Hardware	4,762.00
--	----------

AUDITOR'S REPORT

Groceries and Provisions	1,547.82	
Laundry	381.47	
Lumber	567.64	
Power, Fuel and Light	2,606.25	
Printing, Office Supplies, Etc.	387.53	
Supplies for Girls' Course	434.33	
Text and Reference Books	96.56	
Telephone	112.15	
Transfers	33.00	
Various Other Supplies	1,070.32	
All Other Expenses	311.86	
	<hr/>	\$920,827.61
Returned to Treasury		214.34
		<hr/>
		\$921,041.95

TEXTILE SCHOOL

Appropriation	\$ 10,000.00	
	<hr/>	\$ 10,000.00
	Expended	
To Commonwealth of Massachusetts	\$ 10,000.00	
	<hr/>	\$ 10,000.00

SIGHT SAVING CLASSES

Appropriation	\$ 750.00	
	<hr/>	\$ 750.00
	Expended	
To Various Persons	\$ 184.65	
	<hr/>	\$ 184.65
Returned to Treasury		565.35
		<hr/>
		\$ 750.00

SMITH HUGHES FUND

Appropriation	\$ 3,364.00	
	<hr/>	\$ 3,364.00
	Expended	
Salaries :		
To Various Persons	\$ 3,296.00	
	<hr/>	\$ 3,296.00
Returned to Treasury		68.00
		<hr/>
		\$ 3,364.00

REVENUE**Recreation****PARK DEPARTMENT**

Appropriation	\$ 43,032.05	
	<hr/>	\$ 43,032.05

Expended

Salaries and Wages :		
To Various Persons	\$ 24,455.67	
Labor for Playground	2,698.20	
Other Expenses :		
For Auto Supplies, Repairs	789.45	
Hardware Equipment	1,527.55	
Hay, Grain, Etc.	340.31	
Moving Pictures	910.00	
Office Supplies, Printing, Etc.	222.30	
Plants, Trees, Etc.	1,009.70	
Telephone	28.11	
Transfers	37.34	
Transportation	283.94	
Various Other Supplies	2,432.06	
Work on Comfort Station	3,446.23	
All Other Expenses	2,016.86	
	<hr/>	\$ 40,196.72
Returned to Treasury		2,834.33
		<hr/>
		\$ 43,031.05

BAND CONCERTS

Appropriation	\$ 757.00	
	<hr/>	\$ 757.00

Expended

Other Expenses :		
For Music	\$ 629.99	
All Other	35.00	
	<hr/>	\$ 664.00
Returned to Treasury		93.00
		<hr/>
		\$ 757.00

MEMORIAL DAY—G. A. R.

Appropriation	\$ 1,000.00	
	<hr/>	\$ 1,000.00

Expended

Other Expenses :		
For Collations	\$ 176.47	
Flags and Standards	314.13	
Flowers and Decorations	73.00	
Music	324.05	
Transportation	53.27	
All Other Expenses	59.08	
	<hr/>	\$ 1,000.00

MEMORIAL DAY—S. W. V.

Appropriation	\$ 500.00	
	<hr/>	\$ 500.00

Expended

Other Expenses :		
For Collations	\$ 200.00	
Flags and Standards	22.50	
Flowers and Decorations	12.00	
Music	171.00	
Transportation	35.00	
All Other Expenses	59.31	
	<hr/>	\$ 499.81
Returned to Treasury		\$.19
		<hr/>
		\$ 500.00

MEMORIAL DAY—S. OF V.

Appropriation	\$ 150.00	
	<hr/>	\$ 150.00

Expended

Other Expenses :		
For Various Expenses	\$ 150.00	
	<hr/>	\$ 150.00

AUDITOR'S REPORT

91

FOURTH OF JULY

Appropriation	\$ 405.00	
	<hr/>	\$ 405.00
Expended		
Other Expenses :		
For Music	\$ 395.00	
Other Expenses	10.00	
	<hr/>	\$ 405.00

VETERAN FIREMAN'S ASSOCIATION

Appropriation	\$ 100.00	
	<hr/>	\$ 100.00
Expended		
Other Expenses :		
For Flowers, Decorations	\$ 100.00	
	<hr/>	\$ 100.00

LABOR DAY

Appropriation	\$ 1,200.00	
	<hr/>	\$ 1,200.00
Expended		
Other Expenses :		
For Automobile Hire	\$ 30.00	
Badges	29.65	
Music	964.00	
Prizes	39.15	
All Other	110.00	
	<hr/>	\$ 1,172.80
Returned to Treasury		27.20
		<hr/>
		\$ 1,200.00

ENTERTAINMENT FOR SOLDIERS AND SAILORS OF THE WAR ON JULY 4, 1919.

Appropriation	\$ 1,438.50	
	<hr/>	\$ 1,438.50
Expended		
To Lowell Base Ball Club	\$ 1,438.50	
	<hr/>	\$ 1,438.50

REVENUE

Library

Appropriation	\$ 28,784.06	
	<hr/>	\$ 28,784.06

Expended

Salaries and Wages:		
To Frederick A. Chase, Librarian	\$ 2,746.80	
All Other Service	16,200.98	
Other Expenses:		
For Binding Books and Periodicals	1,454.05	
Books	4,714.63	
Lighting	892.00	
Magazines and Newspapers	575.00	
Office Supplies and Printing	784.98	
Sub Libraries	448.25	
Various Other Supplies	428.25	
All Other Expenses	144.60	
	<hr/>	\$ 28,390.54
Returned to Treasury		393.52
		<hr/>
		\$ 28,784.06

REVENUE

Public Service Enterprise

WATER DEPARTMENT

Cash Receipts	\$371,942.08	
Transfers	250.01	
	<hr/>	\$372,192.09

Expended

Salaries and Labor :		
To Various Persons	\$176,534.52	
Other Expenses :		
For Auto Repairs and Supplies	6,153.09	
Damages	10.00	
Equipment and Repairs	13,166.20	
Fuel	69,368.73	
Hay, Grain, Straw, Etc.	1,111.94	
Insurance	1,700.70	
Lighting	130.46	
Lumber	134.95	
Meters and Fittings	5,680.71	
Office Supplies and Printing	1,388.26	
Oil, Waste, Packing, Etc.	2,425.21	
Pensions	366.00	
Pipe and Fittings	13,190.36	
Refunds	287.57	
Telephone	301.61	
Transfers	637.61	
Transportation	1,230.35	
Vacancy List	47.42	
Various Other Supplies	1,411.30	
Water Works Debt Payment	63,000.00	
Water Works Interest	57,173.75	
All Other Expenses	751.16	
	<hr/>	\$416,201.90
*Debit Balance to 1921		44,029.81
		<hr/>
		\$372,172.09

PAYMENT AND RETIREMENT WATER WORKS LOAN
(October 30, 1890.)

Appropriation	\$1,000,000.00	
	<hr/>	\$1,000,000.00
		Expended
Payment for Retirement Water Works Bonds ..	\$1,000,000.00	
	<hr/>	\$1,000,000.00

REVENUE

Cemeteries

Receipts	\$ 36,554.52	
Balance from 1919	6,114.48	
	<hr/>	\$ 42,669.00

Expended

Salaries :

To Thomas Duckworth, Supt. Edson Cemetery	\$ 1,913.25
Other Salaries and Labor	16,959.38

Other Expenses :

For Hay, Grain, Straw, Etc.	346.89
Hardware, Equipment, Etc.	1,124.92
Office Supplies and Printing	70.45
Plants, Etc.	60.70
Transfers	14.00
Various Other Supplies	510.53
Water	53.06
All Other Expenses	165.32

	<hr/>	\$ 21,218.50
Credit Balance to 1921		21,450.50
	<hr/>	\$ 42,669.00

REVENUE**Debt, Interest, Sinking Funds****INTEREST**

Appropriation	\$253,663.36	
	<hr/>	\$253,663.36

Expended

For Interest	\$253,253.83	
	<hr/>	\$253,253.83
Balance to 1921		409.53
		<hr/>
		\$253,663.36

CITY DEBT

Appropriation	\$344,150.00	
	<hr/>	\$344,150.00

Expended

To Various Financial Institutions and Individuals	\$344,150.00	
	<hr/>	\$344,150.00

SINKING FUNDS

Appropriation from Revenue	\$ 75,000.00	
	<hr/>	\$ 75,000.00

Expended

To the Commissioners of Sinking Funds	\$ 75,000.00	
	<hr/>	\$ 75,000.00

**PAYMENT AND RETIREMENT LOWELL CITY HALL AND
MEMORIAL BUILDING LOAN**

Appropriation	\$450,000.00	
	<hr/>	\$450,000.00

Expended

Payment for Retirement Lowell City Hall and Memorial Building Loan	\$450,000.00	
	<hr/>	\$450,000.00

REVENUE**Taxes****NATIONAL BANK TAX**

Appropriation	\$ 12,112.46	
	<u> </u>	\$ 12,112.46
Expended		
To Commonwealth of Massachusetts	\$ 12,099.40	
	<u> </u>	\$ 12,099.40
Balance to 1921		13.06
		<u> </u>
		\$ 12,112.46

LIQUOR LICENSES

Appropriation	\$ 4.00	
	<u> </u>	\$ 4.00
Expended		
To Commonwealth of Massachusetts	\$ 4.00	
	<u> </u>	\$ 4.00

GRADE CROSSINGS

Appropriation	\$ 2,240.00	
	<u> </u>	\$ 2,240.00
Expended		
To Commonwealth of Massachusetts	\$ 2,240.00	
	<u> </u>	\$ 2,240.00

STATE TAX

Appropriation	\$298,480.00	
	<u> </u>	\$298,480.00
Expended		
To Commonwealth of Massachusetts	\$298,480.00	
	<u> </u>	\$298,480.00

STATE HIGHWAY TAX

Appropriation	\$ 2,694.11	
	<u> </u>	\$ 2,694.11
Expended		
To Commonwealth of Massachusetts	\$ 2,694.11	
	<u> </u>	\$ 2,694.11

COUNTY TAX

Appropriation	\$130,781.10	
	<u> </u>	\$130,781.10
Expended		
To County Treasurer	\$130,781.10	
	<u> </u>	\$130,781.10

SPECIAL TAX—ARMY AND NAVY MEN

Appropriation	\$ 14,071.20	
	<u> </u>	\$ 14,071.20
Expended		
To Commonwealth of Massachusetts	\$ 14,071.20	
	<u> </u>	\$ 14,071.20

IMPROVEMENT HALE'S BROOK

Appropriation	\$ 69.61	
	<u> </u>	\$ 69.61
Expended		
To Commonwealth of Massachusetts	\$ 69.61	
	<u> </u>	\$ 69.61

STATE PORTION POLL TAX

Appropriation	\$ 84,990.00	
	<u> </u>	\$ 84,990.00
Expended		
To Commonwealth of Massachusetts	\$ 79,719.00	
	<u> </u>	\$ 79,719.00
Balance to 1921		\$ 5,271.00
		<u> </u>
		\$ 84,990.00

BAY STATE STREET RAILROAD

Appropriation	\$ 4,934.54	
	<hr/>	\$ 4,934.54

Expended

To Commonwealth of Massachusetts	\$ 4,934.54	
	<hr/>	\$ 4,934.54

CORPORATION TAX**Expended**

To Commonwealth of Massachusetts	\$ 1.48	
	<hr/>	\$ 1.48

NON-REVENUE Unclassified

CLAIMS

Appropriation	\$ 4,627.84	
	<hr/>	\$ 4,627.84
Expended		
Other Expenses :		
For Damages	\$ 159.19	
Injuries	799.60	
Services		
Street Watering and Tax Refunds	2,138.55	
All Other Expenses	933.24	
	<hr/>	\$ 4,030.58
Returned to Treasury		597.26
		<hr/>
		\$ 4,627.84

REVISION OF ORDINANCES

Balance from 1919	\$ 495.50	
	<hr/>	\$ 495.50
Balance to 1921	\$ 495.50	
	<hr/>	\$ 495.50

AUDITING BOOKS

Appropriation	\$ 1,000.00	
	<hr/>	\$ 1,000.00
Expended		
Other Expenses :		
For Auditing	\$ 977.50	
Balance to 1921	\$ 22.50	
	<hr/>	\$ 1,000.00

WORKMEN'S COMPENSATION

Appropriation	\$ 6,011.43	
	<hr/>	\$ 6,011.43
Expended		
Other Expenses :		
To Various Persons (Compensation)	\$ 4,928.96	
First Aid, Medical Treatment	566.70	
Printing	6.25	
All Other	24.09	
	<hr/>	\$ 5,526.00
Returned to Treasury		485.43
		<hr/>
		\$ 6,011.43

GENERAL EXPENSES

Appropriation	\$ 11,004.70	
	<hr/>	\$ 11,004.70

Expended

Other Expenses :

For Decorations	\$ 219.00	
Fireworks	1,000.00	
Music	443.00	
Office Supplies, Printing, Binding	2,533.70	
Memorial Day Celebration	340.90	
Preparation of Bonds	3,104.57	
Services	34.35	
Transfers	90.00	
Transportation	72.18	
All Other Expenses	1,466.60	
	<hr/>	\$ 9,304.30

Returned to Treasury	1,700.40	
	<hr/>	\$ 11,004.70

**APPROPRIATION FOR LIQUIDATION AND PAYMENT CERTAIN
ACCOUNTS AND BILLS DUE FROM CITY OF LOWELL
TO VARIOUS FIRMS AND PERSONS FOR AND
ON ACCOUNT OF SEVERAL OF ITS
DEPARTMENTS DURING THE
FISCAL YEAR 1919.**

Appropriation	\$ 17,270.00	
	<hr/>	\$ 17,270.00

Expended

Other Expenses :

For Buildings Department	\$ 6,246.96	
Charity—Out Door Relief Department	1,023.05	
Engineering Department	1.95	
Fourth of July Celebration	47.04	
Insurance Department	1,473.34	
School Department	7,033.79	
Vocational School Department	1,443.87	
	<hr/>	\$ 17,270.00

LOWELL CHARTER COMMISSION

Appropriation	\$ 1,000.00	
	<hr/>	\$ 1,000.00

Expended

Other Expenses :

For Advertising	\$ 65.94	
Office Supplies and Printing	43.45	
All Other Expenses	67.00	
	<hr/>	\$ 176.39
Balance to 1921		823.61
		<hr/>
		\$ 1,000.00

NON-REVENUE

Health and Sanitation

SEWER CONSTRUCTION

Balance from 1919	\$ 2,790.05	
Appropriation	93,009.50	
	<hr/>	\$ 95,799.55
Expended		
Wages:		
To Labor	\$ 75,146.67	
Other Expenses:		
For Brick and Cement	2,239.26	
Castings	499.09	
Fuel	116.35	
Hardware and Equipment	800.48	
Lumber	175.30	
Pipe and Fittings	7,529.47	
Transfers	3,323.53	
All Other Expenses	1,116.21	
	<hr/>	\$ 95,438.36
Balance to 1921		361.19
		<hr/>
		\$95,799.55

ISOLATION HOSPITAL (Equipment and Furnishings)

Balance from 1919	\$ 20,550.29	
	<hr/>	\$ 20,550.29
Expended		
Other Expenses:		
For Furniture and Furnishings	\$ 8,119.13	
Hardware and Equipment	1,997.10	
Kitchen Equipment	4,009.85	
Laundry Equipment	438.08	
Medical Equipment	2,699.95	
Various Other Supplies	2,603.29	
All Other Expenses	145.10	
	<hr/>	\$ 20,012.50
Balance to 1921		537.79
		<hr/>
		\$ 20,550.29

PUBLIC BATH AND COMFORT STATION

Balance from 1919	\$ 9,252.43	
	<hr/>	\$ 9,252.43

Expended

Other Expenses :		
For Contracts	\$ 3,788.83	
All Other Expenses	5,338.00	
	<hr/>	\$ 9,126.83
Balance to 1921		125.60
		<hr/>
		\$ 9,252.43

NON-REVENUE

Highways and Bridges

PAVING

Appropriation	\$ 80,000.00	
	<hr/>	\$ 80,000.00
Expended		
Wages:		
To Labor	\$ 58,093.01	
Other Expenses:		
For Brick and Cement	8,732.47	
Edgestone, Etc.	649.51	
Paving Blocks	3,753.81	
Teaming	1,100.00	
Transfers	1,009.71	
Transportation	613.77	
All Other Expenses	3,941.90	
	<hr/>	\$ 77,894.18
Balance to 1921		2,105.82
		<hr/>
		\$ 80,000.00

MACADAMIZING

Balance from 1919	\$ 2,695.95	
Appropriation	60,000.00	
	<hr/>	\$ 62,695.95
Expended		
Wages:		
To Labor	\$ 44,182.73	
Other Expenses:		
For Equipment and Repairs	4,823.17	
Fuel	3,540.22	
Oil, Tar, Tarite	7,510.40	
Stone	172.50	
Teaming	2,125.00	
Transfers	286.98	
All Other Expenses	22.04	
	<hr/>	\$ 62,663.04
Balance to 1921		32.91
		<hr/>
		\$ 62,695.95

NEW SIDEWALKS

Balance from 1919	\$ 570.76	
Appropriation	16,000.00	
	<hr/>	\$ 16,570.76

Expended

Wages :		
To Labor	\$ 5,782.45	
Other Expenses :		
For Concrete	745.65	
Edgestone	5,019.98	
Granolithic Work	4,190.88	
Transfers	546.98	
All Other Expenses	824.38	
	<hr/>	\$ 16,563.34
Balance to 1921		7.42
		<hr/>
		\$ 16,570.76

BRIDGE CONSTRUCTION

Balance from 1919	\$ 2,042.37	
Appropriation	92,000.00	
	<hr/>	\$ 94,042.37

Expended

Wages :		
To Labor	\$ 1,891.42	
Other Expenses :		
For Contracts	69,923.90	
Equipment and Repairs	1,434.07	
Lumber	3,951.76	
Transfers	984.66	
Various Other Supplies	81.00	
All Other Expenses	50.38	
	<hr/>	\$ 78,317.19
Balance to 1921		15,725.18
		<hr/>
		\$ 94,042.37

CONSTRUCTION AND EXTENSION OF FIRST ST.

Balance from 1919	\$ 23,080.13	
	<hr/>	\$ 23,080.13

Expended

Wages:		
To Labor	\$ 2,096.47	
Other Expenses:		
For Contracts	8,559.61	
Equipment	420.00	
	<hr/>	\$ 11,076.08
Balance to 1921		12,004.05
		<hr/>
		\$ 23,080.13

WIDENING LOCKE STREET

Appropriation	\$ 12,634.77	
	<hr/>	\$ 12,634.77

Expended

Wages:		
To Labor	\$ 925.85	
Other Expenses:		
For Land and Buildings	5,437.00	
All Other Expenses	86.67	
	<hr/>	\$ 6,449.52
Balance to 1921		6,185.25
		<hr/>
		\$ 12,634.77

NON-REVENUE**Education****ACQUIRING LAND, CONSTRUCTING NEW HIGH SCHOOL**

Balance from 1919	\$ 25,572.05	
Appropriation	1,750,000.00	
		<hr/> \$1,775,572.05

Expended**Salary and Wages:**

To Nelson D. Keables	\$ 1,770.00
Labor	57.34

Other Expenses:

For Advertising	357.31
Architectural Service	27,765.68
Contracts	422,749.16
Various Other Supplies	120.20
All Other Expenses	712.50
	<hr/> \$453,532.19

Balance to 1921	1,322,039.86
-----------------------	--------------

\$1,775,572.05

ACQUIRING LAND AND CONSTRUCTING SCHOOLS

Balance from 1919	\$124,040.48	
		<hr/> \$124,040.48

Expended**Wages:**

To Labor	\$ 4,814.91
----------------	-------------

Other Expenses:

For Architectural Services	2,700.35
Contracts	87,454.44
Equipment	5,251.61
Transfers	1,430.39
All Other Expenses	69.38

\$101,721.08

Balance to 1921	22,319.40
-----------------------	-----------

\$124,040.48

**ACQUIRING LAND AND CONSTRUCTING SCHOOL HOUSES
YEAR 1920**

Appropriation	\$ 10,000.00	
	\$ 10,000.00	

Expended

Wages :

To Labor	\$	
----------------	----	--

Other Expenses :

For Hardware	124.34	
--------------------	--------	--

Lumber	3,851.76	
--------------	----------	--

Teaming	12.00	
---------------	-------	--

Transfers	1,201.97	
-----------------	----------	--

All Other Expenses	673.88	
--------------------------	--------	--

	\$ 5,863.95	
Balance to 1921		1,305.83

	\$ 7,169.78	
--	-------------	--

NON-REVENUE**Recreation****ACQUIRING LAND FOR PUBLIC PARKS ON THE SOUTHERLY
SIDE OF RIVERSIDE STREET**

Appropriation	\$ 12,320.00	
	<hr/>	\$ 12,320.00
Other Expenses :		
For Land and Buildings	\$ 3,937.50	
Services	8,308.27	
Transfers	42.31	
All Other Expenses	31.92	
	<hr/>	\$ 12,320.00

NON-REVENUE

Water Works

EXTENSION MAINS AND DEPARTMENTAL EQUIPMENT

Balance from 1919	\$ 52,201.46	
Appropriation	15,000.00	
	<hr/>	\$ 67,201.46
Expended		
Wages :		
To Labor	\$ 5,794.01	
Other Expenses :		
For Hardware and Equipment	39,987.81	
Pipe, Valves, Etc.	1,785.91	
Sand, Gravel and Cement	1,715.58	
Transfers	602.72	
Various Other Supplies	533.12	
	<hr/>	\$ 50,419.15
Balance to 1921		16,782.31
		<hr/>
		\$ 67,201.46

ACQUIRING LAND AND PROTECTING WATER SUPPLY

Balance from 1919	\$ 3,783.76	
	<hr/>	\$ 3,783.76
Expended		
Other Expenses :		
For Services	\$ 250.00	
All Other Expenses	70.25	
	<hr/>	\$ 320.25
Balance to 1921		3,463.51
		<hr/>
		\$ 3,783.76

NON-REVENUE**Unclassified****MUNICIPAL PURPOSES**

Balance from 1919	\$ 1,625.02	
	<hr/>	\$ 1,625.02
Balance to 1921	\$ 1,625.02	
	<hr/>	\$ 1,625.02

LOWELL MEMORIAL AUDITORIUM

Balance from 1919	\$ 24,888.97	
Appropriation	860,000.00	
Cash Receipts	482.63	
Department Transfers	189.29	
	<hr/>	\$885,560.89

Expended

Other Expenses:		
For Contracts	\$233,254.12	
Land and Buildings	14,730.58	
Services	26,251.64	
All Other Expenses	204.89	
	<hr/>	\$274,441.23
Balance to 1921		611,119.66
		<hr/>
		\$885,560.89

FUNDS

SINKING
HAPGOOD WRIGHT
JOHN DAVIS
CEMETERY

FUNDS, DEC. 31, 1920

High School due April, 1921—\$150,000.00	
Value January 1, 1920	\$150,678.10
Value December 31, 1920	173,077.46
Increase during 1920	\$ 22,399.36
New School Houses due July, 1926—\$200,000.00	
Value January 1, 1920	\$139,956.54
Value December 31, 1920	178,334.12
Increase during year 1919	\$ 38,377.58
<hr/>	
Hapgood Wright Centennial Fund due 1926.	
Amount of Fund Jan. 1, 1920	\$ 12,655.03
Increase to December 31, 1920	600.64
Total	\$ 13,255.67
<hr/>	

Cemetery

Cemetery Perpetual Care Fund:	
On hand January 1, 1920	\$148,374.98
On hand January 1, 1921	151,719.48
Increase during year 1920	\$ 3,344.50
Deposited in banks	\$141,065.00
Interest undrawn	10,654.48
Total amount of fund Dec. 31, 1920	\$151,719.48

**REPORT OF THE COMMISSIONERS OF THE SINKING FUNDS
FOR THE YEAR 1920.**

Lowell, Mass., Jan. 1, 1921

To the Municipal Council of Lowell:

Gentlemen:—The Commissioners of the Sinking Funds of the City of Lowell have the honor to submit the following report of the several Sinking Funds of said City and of the Hapgood Wright Centennial Fund for the year 1920;

Full value of all Sinking Funds January 1, 1921,	\$ 351,411.58	
Full value of all Sinking Funds January 1, 1920,	1,701,802.83	
	<hr/>	
Decrease during the year		\$1,350,391.25
Value of Water Loan Sinking Fund January 1, 1921	0.00	
Value of Water Loan Sinking Fund January 1, 1920	968,360.54	
	<hr/>	
Decrease during year		\$ 968,360.54
Value of all other Sinking Funds January 1, 1921	351,411.58	
Value of all other Sinking Funds January 1, 1920	733,442.29	
	<hr/>	
Decrease during the year		\$ 382,030.71
	<hr/>	
Total decrease as above		\$1,350,391.25
Value of the Hapgood Wright Centennial Trust Fund January 1, 1921	13,255.67	
Value of the Hapgood Wright Centennial Trust Fund January 1, 1920	12,655.03	
	<hr/>	
Increase during the year	\$	600.64

WATER LOAN SINKING FUND

	Securities	Cash	Total
On hand Jan 1, 1920	\$ 967,950.00	410.54	\$968,360.54
RECEIVED DURING 1920			
CASH—Annual Appropriation		16,000.00	
Special Appropriation		40,258.27	
Income on Investment		48,357.64	
Income on Bank Deposits ..		262.05	
Securities, sold or matured		1,526,496.49	
SECURITIES — Bought during			
1920	643,500.00		
	<hr/>	<hr/>	<hr/>
	\$1,611,450.00	\$1,631,784.99	
PAID DURING 1920			
SECURITIES—Matured and sold	1,611,450.00		
CASH—For Securities purchased		631,784.99	
	<hr/>	<hr/>	<hr/>
		1,000,000.00	
Paid to the City of Lowell to pay and retire Water Loan		\$1,00,000.00	
	<hr/>	<hr/>	<hr/>
On hand December 31, 1920	0.00	0.00	0.00
	<hr/>	<hr/>	<hr/>
Decrease during 1920			\$968,360.54

CITY HALL AND MEMORIAL BUILDING SINKING FUND.

	Securities	Cash	Total
On hand Jan. 1, 1920	\$442,500.00	\$ 307.65	\$442,807.65
RECEIVED DURING 1920			
CASH—Annual Appropriation		7,500.00	
Special Appropriation		4,241.73	
Income on Investments		20,642.60	
Income on Bank Deposits		211.95	
Securities, sold or matured		570,409.90	
SECURITIES—Bought during 1920	152,500.00		
	<hr/>	<hr/>	<hr/>
	\$595,000.00	\$603,313.83	
PAID DURING 1920			
SECURITIES—Sold or matured	595,000.00		
CASH—For Securities purchased		153,313.83	
	<hr/>	<hr/>	<hr/>
		450,000.00	
Paid to the City of Lowell to pay and retire City Hall and Memorial Building Loan		450,000.00	
	<hr/>	<hr/>	<hr/>
On hand December 31, 1920	0.00	0.00	0.00
	<hr/>	<hr/>	<hr/>
Decrease during 1920			\$442,807.65

LOWELL HIGH SCHOOL SINKING FUND.

	Securities	Cash	Total
On hand Jan. 1, 1920.....	\$150,500.00	\$ 178.10	\$150,678.10
RECEIVED DURING 1920			
CASH—Annual Appropriation		3,000.00	
Income on Investments		9,325.81	
Income on Bank Deposits		114.00	
Securities, sold or matured		212,036.65	
SECURITIES—Bought during 1920	237,000.00		
	<hr/>	<hr/>	
	\$387,500.00	\$224,654.56	
PAID DURING 1920			
SECURITIES—Sold or matured	216,500.00		
CASH—For Securities purchased		222,577.10	
	<hr/>	<hr/>	
On hand December. 31, 1920	\$171,000.00	\$ 2,077.46	\$173,077.46
	<hr/>	<hr/>	
Increase during 1920			\$ 22,399.36

SECURITIES BELONGING TO THIS FUND

	Coupon Bonds	Rate	Par Value	Maturity
12	N. Y. N. H. & H. R. R.	4	\$12,00.00	July, 1955
5	Boston & Maine R. R.	4	5,000.00	Aug., 1942
25	Boston & Maine R. R.	4	25,000.00	Sept., 1926
2	St. Johnsbury & Lake Cham- plain R. R.	5	2,000.00	Mar., 1944
2	Boston & Lowell R. R.	4	2,000.00	Apr., 1932
1	City of Lima, Ohio	5	1,000.00	Apr., 1921
2	City of Lowell	4	2,000.00	Apr., 1921
1	U. S. Govt. 4th Liberty Loan	4¼	10,000.00	Oct., 15, 1933/38
35	Boston Elevated R. R.	4	35,000.00	May, 1935
10	Fitchburg R. R.	4	10,000.00	May, 1925
5	U. S. Govt. 2nd Liberty Loan	4¼	50,000.00	Nov., 15, 1927/42
10	N. Y. N. H. & H. R. R.	4	10,000.00	May, 1954
7	Boston & Maine R. R.	6	7,000.00	June, 1930
			<hr/>	
			\$171,000.00	
	Cash on deposit in Appleton Nat. Bank		2,077.46	
			<hr/>	
			\$173,077.46	

NEW SCHOOL HOUSES SINKING FUND

	Securities	Cash	Total
On hand Jan 1, 1920	\$139,500.00	\$ 456.54	\$139,956.54
RECEIVED DURING 1920			
CASH—Annual Appropriation		4,000.00	
Income on Investments		8,941.36	
Income on Bank Deposits		145.70	
SECURITIES—Sold or Matured		235,163.90	
SECURITIES—Bought during 1920	278,000.00		
	\$ 417,500.00	248,707.50	
PAID DURING 1920			
SECURITIES—Sold or matured	248,500.00		
CASH—For Securities purchased		239,373.38	
On hand December 31, 1920	169,000.00	9,334.12	178,334.12
Increase during 1920			\$ 38,377.58

SECURITIES BELONGING TO THIS FUND

Coupon Bonds		Rate	Par Value	Maturity
63	N. Y. N. H. H. R. R.	4 %	\$63,000.00	July, 1955
4	Boston & Maine R. R.	4	4,000.00	Aug., 1942
1	City of Lowell	4	1,000.00	Apr., 1921
15	N. Y. N. H. & H. R. R.	4	15,000.00	May, 1954
25	Worcester Consolidated R. R.	5	25,000.00	Nov., 1927
8	Boston & Maine R. R.	6	8,000.00	June, 1930
15	Boston Elevated R. R.	5	15,000.00	Dec., 1942
28	Lynn & Boston St. R. R.	5	28,000.00	Dec., 1924

Registered Bonds

1	Boston & Maine R. R.	4½	10,000.00	Jan., 1944
			\$169,000.00	
Cash on deposit in Appleton National Bank			9,334.12	
			\$178,334.12	

HAPGOOD WRIGHT CENTENNIAL TRUST FUND

	Securities	Cash	Total
On hand January 1, 1920	\$12,150.00	\$ 505.03	\$12,655.03
RECEIVED DURING 1920			
CASH—Income on Investments		577.11	
Income on Bank Deposits		23.53	
On hand December 31, 1920	\$12,150.00	\$ 1,105.67	\$13,255.67
Increase during 1920			\$ 600.64

SECURITIES BELONGING TO THIS FUND

7 U. S. Govt. Victory Loan	4¾	Coupon Bonds	\$4,650.00
9 U. S. Govt. Victory Loan	4¾	Registered	7,5000.00
Cash in Lowell Institution for Savings			1,105.67
			\$13,255.67

Principal sum in fund	\$7,343.79
Accrued interest	5,911.88
	\$13,255.67

Respectfully submitted,

AUSTIN K. CHADWICK
 CHARLES L. KNAPP
 FRANK P. MCGILLY

Commissioners of Sinking Funds of the City of Lowell.

ACCOUNT OF THE CITY TREASURER AND COLLECTOR OF TAXES FOR THE YEAR 1920.

Lowell, Mass., Jan. 1, 1921.

To the Municipal Council:

Gentlemen:—I have the honor to submit the following report of the Receipts and Expenditures of the City of Lowell for the financial year 1920:

Monthly Receipts As Follows:

January	\$ 173,110.22	
February	356,970.02	
March	536,184.68	
April	760,937.97	
May	834,223.54	
June	530,089.62	
July	309,835.84	
August	729,088.43	
September	740,032.92	
October	3,261,800.97	
November	1,208,156.18	
December	967,358.79	\$10,407,789.18
		<hr/>
Cash balance January 1, 1920		392,658.61
		<hr/>
		\$10,800,447.79

Monthly Payments As Follows:

January	\$ 247,212.51	
February	372,460.44	
March	581,636.65	
April	502,841.57	
May	783,876.76	
June	514,388.60	
July	531,731.52	
August	662,279.01	
September	399,596.67	
October	2,387,624.52	
November	1,785,074.63	
December	1,222,465.59	
		<hr/>
		\$ 9,991,188.47
Cash balance December 31, 1920		809,259.32
		<hr/>
		\$10,800,447.79

Respectfully submitted,

FRED H. ROURKE

City Treasurer and Collector
of Taxes

**STATEMENT OF THE CITY TREASURER RELATING
TO SPECIAL FUNDS FOR CARE OF PUBLIC BURIAL GROUNDS.**

Lowell, Mass., Jan. 1, 1921.

To the Municipal Council:

Gentlemen:—I have the honor to submit the following statement of Special Funds in my hands, deposited for perpetual care of Lots in the the Public Burial Grounds of the City of Lowell.

On hand January 1, 1920 \$126,740.00

Received during the year from—

Walter Beardsley	\$ 25.00
Elizabeth M. Leslie	100.00
Fred Booth	25.00
Abbie S. Simonds	100.00
Thomas Duckworth (Fred N. Janvrin)	100.00
Edward Drewett	100.00
Edward Drewett	100.00
William Sheppard, Exr.	100.00
Mrs. A. S. Maynard	100.00
Joseph Fleming	100.00
James McCord, Jr.	100.00
Mrs. Esther A. Frost	100.00
Mrs. Anna M. Moore	50.00
Mrs. Charles C. Leach	100.00
Elizabeth Annie Davies	100.00
H. C. Sweetzer, Admr.	100.00
Milon D. Brown	100.00
Mrs. Mary E. Davis	100.00
Wesley M. Wilder	100.00
William H. Saunders	100.00
William H. Saunders	25.00
William H. Saunders	50.00
John E. Wainwright	100.00
Mary F. Kelley	100.00
Mrs. Mary Barber	100.00
Agostino Dirubbo	25.00
Frank Barnard	100.00
Louis J. Perry	100.00
Mrs. C. S. Crane	100.00

AUDITOR'S REPORT

123

A. G. and G. P. Burns	\$100.00
Allen, Hallas	100.00
Allen, Hallas	100.00
Mrs. H. S. Whittaker	100.00
Ida Fletcher	100.00
Isabella Williamson	100.00
Matilda Jones	100.00
Samuel A. Pickering	100.00
Miss Ellen A. Stillings	100.00
Sarah E. Lovejoy	100.00
Sarah A. Varney	100.00
Martha Clark	100.00
Georgia F. Gratto, Admx.	50.00
Emily C. Palm	100.00
Thomas Chalmers	100.00
James Johnston	100.00
Mrs. Flora Belle McCoy	100.00
James E. Mountford	100.00
Isabel Church	100.00
William A. Mack	25.00
John A. Weinbeck	100.00
John A. Weinbeck	100.00
Mrs. George O. Hutchins	100.00
Sarah J. Bowring	100.00
Sarah Dean	100.00
Annie Campbell	100.00
John A. Cates	100.00
Mrs. Georgia M. Stevens	100.00
Elizabeth M. Small	100.00
Mrs. T. H. Moore	100.00
Alphonse Hussey	50.00
James L. Jewett	100.00
Lillian M. Haskell	100.00
John Duckworth	100.00
Annie Johns	100.00
Mrs. Ellen Bee	100.00
William J. Hart	100.00
Stephen H. Jones	100.00
Mrs. James Hobson	50.00
Percy A. Platt	100.00
Osmer G. Clough	100.00
George G. Hanaford	100.00
Walter S. Miller	100.00
Caroline Hoyle	100.00

Miss G. A. Spinney	\$100.00
Mrs. W. E. Farrar	100.00
William H. Cottrell	100.00
Mrs. Lily J. Allen, Admx.	100.00
Ellen M. Marstin	200.00
Miss Katherine Kelly, Exec.	50.00
Elizabeth Shaw	50.00
Hugh Green	100.00
William H. Saunders	50.00
William H. Saunders	25.00
Ernest J. Bjorkman	100.00
Roland E. Stevens, Admr.	100.00
Minnie E. Parker	100.00
Mary E. Rowley	100.00
Annie N. Barr	100.00
Sarah A. Cummings	100.00
Ella J. Dingwell	50.00
John J. Harvey, Adm.	100.00
George E. Hutchins	100.00
Helen S. Burch	100.00
Marion B. McAuley	100.00
Leonard B. Wormall	100.00
Mrs. Anna Randall	100.00
Mrs. S. B. Butterworth	100.00
Johannah Prince	100.00
Gustave Anderson	100.00
McIntire and Wilson	100.00
Avidis M. Torigian	100.00
Mrs. Cornelia M. Canfield	50.00
E. A. Wilson	200.00
Thomas Shaw	100.00
George F. Garland	100.00
Alice J. Williamson	50.00
William H. Saunders	100.00
William H. Saunders	25.00
William H. Saunders	25.00
Leonard Morrison	200.00
Ernest L. Taylor, Admr.	100.00
John J. Harvey, Exr.	100.00
Harriet A. Trenholm	100.00
Harriet A. Trenholm	100.00
Maria F. West	100.00
Mrs. Flora E. Severance	100.00
Abbie Jackson	100.00

AUDITOR'S REPORT

125

Agnes C. Porter	\$100.00
Mrs. Frederick Chalk	100.00
Margaret and David G. Jones	100.00
Frank J. Burch	100.00
Harriet A. Root	100.00
Samuel Holgate	100.00
McIntire & Wilson	100.00
George A. Scribner	100.00
Alice Sutcliffe	100.00
Edgar J. Mellows	100.00
Mrs. Robert H. Staples	100.00
Ethel M. Trumbell	100.00
Ethel M. Trumbell	100.00
John Worth	100.00
Thomas Duckworth (F. H. Hodgman)	200.00
Mrs. Bertha N. Bell	100.00
Thomas Duckworth (C. H. Whitney)	100.00
Miss Angie Kimball	100.00
Adelbert W. Walker	100.00
John T. Wood	50.00
William Arnold, Admr.	25.00
Nancy L. Wilson	100.00
Mrs. Annie L. Foster	100.00
Mrs. Clara Wrigley	50.00
Mrs. Lillian B. Flack	100.00
Mrs. Lucia L. Bell	100.00
Millie M. Field, Est.	100.00
Isabel M. Berry	100.00
Miss Elinda S. Armstrong	100.00
Laura E. Haynes	100.00
Mrs. Anders Thomasson	100.00
Fred A. Bassett	100.00
William H. Saunders	25.00
Frank A. Griffin, Trustee	100.00
Miss Zora Feindel	100.00
Thomas Duckworth (Samuel Pouliot)	25.00
George T. Butterworth	100.00
	<hr/>
	\$ 14,325.00
On hand December 31, 1920	<hr/>
	\$141,065.00

AUDITOR'S REPORT

The following amounts are invested for the care of burial grounds as follows:

Lowell Five Cents Savings Bank	\$ 17,125.000
Central Savings Bank	16,700.00
Merrimack River Savings Bank	17,050.00
Mechanics' Savings Bank	16,100.00
City Institution for Savings	19,400.00
Lowell Institution for Savings	16,425.00
Washington Savings Institution	16,775.00
Middlesex Safe Deposit & Trust Co.	17,940.00
Old Lowell National Bank (Savings Dept.) ..	3,550.00

On hand December 31, 1920 \$141,065.00

Respectfully submitted,

FRED H. ROURKE,
City Treasurer.

GENERAL INFORMATION

CITY AUDITOR'S REPORT OF FUNDS HELD AND
USED BY CITY

PROPERTY OWNED BY CITY
TABLES
LOANS
NEW HIGH SCHOOL

.....

TOTAL VALUATION AND CITY DEBT, 1919**Real Estate and Personal Property Owned by the City**

	Personal Valuation	Real Estate Valuation	Total City Valuation
Commissioner of Public Safety	\$ 116,144.00	\$ 524,400.00	\$ 640,544.00
Commissioner of Finance	12,155.00		12,155.00
Commissioner of Public Property and Licenses	85,510.00	2,134,675.00	2,220,185.00
Commissioner of Streets and High- ways	116,031.00		116,031.00
Commissioner of Water Works and Fire Protection	1,735,924.09	1,126,100.00	2,862,024.09
School Department	54,300.00	2,605,090.00	2,659,390.00
Miscellaneous		10,525.00	10,525.00
Total Valuation	<u>\$2,120,064.09</u>	<u>\$6,400,790.00</u>	<u>\$8,520,854.09</u>
Gross City Debt			<u>5,747,685.00</u>
Excess in Valuation of all City Property over the Gross Debt of City			<u>\$2,773,169.09</u>

**PERSONAL PROPERTY IN CHARGE OF COMMISSIONER OF
PUBLIC SAFETY**

Mayor :

Furniture in office, etc. \$ 800.00

Health :

Furniture, etc., in office 177.00
 Bacteriological Laboratory 148.00
 Milk and Vinegar Office 860.00
 Horses 7,000.00
 Wagons and Sleds 6,000.00
 Harnesses 1,000.00
 Shop 1,500.00

Law :

Furniture in office, etc. 500.00

Police :

Furniture, etc., in offices 2,453.00
 Equipment 1,375.00
 Stable 7,331.00
 Electrician's Department 24,800.00

State Aid :

Furniture, etc., in office 200.00

Charity :

Outdoor Relief 4,000.00
 Hospital 27,000.00

\$ 85,144.00

CHARITY DEPARTMENT

Real Estate

	Buildings Value	Area	Land Value	Total Value
Chelmsford St. Hospital Buildings	\$211,300.00	45.73 acres	\$22,300.00	\$233,600.00
Isolation Hospital	270,000.00	59.39 "	3,000.00	273,000.00
Land Chelmsford St.		139,530 sq. ft.	2,800.00	2,800.00
Land Chelmsford St.		176,300 "	3,500.00	3,500.00
Land Chelmsford St.		10.30 acres	3,100.00	3,100.00
Land in Town of Chelmsford		28.08 "	8,400.00	8,400.00
	<u>\$481,300.00</u>		<u>\$43,100.00</u>	<u>\$524,400.00</u>

Personal Property

Outdoor Relief	\$ 4,000.00
Hospital	27,000.00
	<u>\$31,000.00</u>

PERSONAL PROPERTY IN CHARGE OF COMMISSIONER OF FINANCE

Auditor—Furniture in office, etc.....	\$ 1,305.00
Assessors— “ “ “ “	1,100.00
Treasurer— “ “ “ “	1,000.00
City Clerk— “ “ “ “	550.00
Elections— “ “ “ “	7,500.00
Registrars— “ “ “ “	85.00
Supply— “ “ “ “	575.00
	<hr/>
	\$12,155.00
	<hr/>

PERSONAL PROPERTY IN CHARGE OF COMMISSIONER OF PUBLIC PROPERTY AND LICENSES

Building:	
Shop and Storehouses	\$ 10,500.00
Machinery, tools, etc.	1,270.00
Hardware	140.00
Lumber	500.00
School furnishings	2,000.00
Election property	4,150.00
Coffins, stock and tools	250.00
Stable property	3,180.00
Masons' stock and tools	60.00
Pipers' stock	315.00
Painters' stock and tools and unclassified	1,100.00
Office property	1,000.00
Cemetery	16,000.00
License Commissioners	850.00
Park:	
Furniture, etc., in office, stable and yard	8,200.00
Smoke Inspector	70.00
Moths	1,800.00
Messenger:	
Furniture in charge	1,300.00
Boiler room	3,100.00
Weigher	275.00
Sealer	900.00
Wires	400.00
Schools:	
Furniture, etc., in office	1,150.00
Horses, etc.	1,000.00
Equipment, High School	10,000.00
Equipment, Industrial School	16,000.00
	<hr/>
	\$ 85,510.00
	<hr/>

PUBLIC PROPERTY AND LICENSES DEPARTMENT

Real Estate				
	Value Bldg.	Area	Land Value	Total Value
City Hall	\$492,000.00			
Memorial Building, Merrimack St., Colburn St., Moody St. and Worthen St.	240,000.00	61,280	\$245,100.00	\$977,100.00
Police Station, Market St.	49,700.00			
City Scales	600.00			
Public Landing and Police Stable	3,000.00	16,345	73,550.00 }	
Land in rear Market St.		4,537	3,450.00 }	133,600.00
Land in rear Market St.		4,382	3,300.00 }	
Wooden Building (polling booth)	350.00			
Wooden Building (Old Fire Station)	850.00			
Land, Fletcher, Willie and Cross Sts.		5,150	2,050.00	3,250.00
Comfort Station, Paige St.	30,000.00	area in street		30,000.00
Carriage Sheds	4,800.00			
2½ Story Brick Building, Office, Carpenter and Blacksmith Shop	9,600.00			
Sprinkler Sheds	6,000.00			
City Stables (brick)	48,000.00			
Land, Fletcher, Broadway and Lagrange Sts.		72,500	25,400.00	93,800.00
Brick Stable	42,000.00			
Carriage Shed (brick and wood)	3,600.00			
Shed (wood)	3,000.00			
2 Story Building (Sewer Dept.) wood	3,000.00			
Land, Fletcher, Cross and Broadway		80,980	28,350.00	119,200.00
Shed	600.00			

PUBLIC PROPERTY AND LICENSES DEPARTMENT, Real Estate—Continued

	Value Bldg.	Area	Land Value	Total Value
Carpenter and 3 Story Brick Building	21,600.00			
2 Story Wooden Building, Carpenter Storage	7,200.00			
Auto and Carriage Sheds, brick and wood	9,600.00			
Sheds	250.00			
Rifle Range, Dracut	19,200.00	1.65	2,700.00	21,900.00
Magazine Building rear of Chelmsford St. ..		sq. ft.	400.00	400.00
Memorial-Auditorium		"	49,350.00	49,350.00
Garage 2-24 E. Merrinack St.	6,600.00	6,622	9,350.00	15,950.00
	\$1,001,550.00		\$443,000.00	\$1,444,550.00

DEPARTMENT OF PUBLIC PROPERTY—PARK DEPARTMENT

Real Estate

	Valuation	Area	Feet	Value Land	Total Value
Bath House	\$ 17,000.00		\$ 261,928	\$ 13,100.00	\$ 30,100.00
Belvedere Park			74,275	29,700.00	29,700.00
Chambers St. Playground			55,239	5,700.00	5,700.00
Fair Grounds Playground			381,367	19,550.00	19,550.00
Colonial Ave. Riverbank			152,400	leased	leased
Coburn Square			10,989	1,000.00	1,000.00
Fort Hill Park		34.40		154,800.00	154,800.00
Glacial Oval			690	100.00	100.00
Harris Oval			5,090	500.00	500.00
Hillside Park			2,669	250.00	250.00
Hovey Square			945	150.00	150.00
Hutchinson Square			1,416	150.00	150.00
Lenox Square (barn)			18,195	2,000.00	3,050.00
Lincoln Square	\$ 8.50		600	150.00	150.00
Lucy Larcom Park			21,970	leased	leased
Mansur Square			1,743	175.00	175.00
Middlesex Square			1,514	200.00	200.00
Monument Square			3,928	23,550.00	23,550.00
Mt. Vernon Park			25,902	4,000.00	4,000.00
North Common		11.39	2,215	125,300.00	125,300.00
Parker Spaulding Park			975	200.00	200.00
Penniman Square			1,210	250.00	250.00
Princeton Square				150.00	150.00
Shedd Park		56.00		44,800.00	44,800.00
South Common			911,653	227,900.00	227,900.00
Tyler Park			78,919	8,000.00	8,000.00
Water Works Square			2,050	500.00	500.00
Varnum Ave. Riverbank			19,860	leased	leased
Varnum Park			5,882	5,900.00	5,900.00
N. E. cor. Mammoth Rd. and Riverside St.			7,420	2,250.00	2,250.00
S. W. cor. Mammoth Rd. and Varnum Ave.			6,481	1,750.00	1,750.00
	<u>\$ 17,850.00</u>			<u>\$672,275.00</u>	<u>\$690,125.00</u>

**PERSONAL PROPERTY IN CHARGE OF COMMISSIONER OF
STREETS AND HIGHWAYS**

Streets :	
Store room	\$ 4,070.00
Yard	14,340.00
Shop	2,000.00
Stone	6,780.00
Blacksmith Shop	890.00
Tool House	568.00
Dracut Ledge	14,700.00
Horses and Harnesses	21,788.00
Miscellaneous	2,200.00
Watering Streets :	
Carts, etc.	12,635.00
Sewer :	
Office	725.00
Miscellaneous	19,850.00
Lighting Streets	10,025.00
Engineer :	
Furniture in office, etc.	2,560.00
Tools and materials	2,900.00
	<hr/>
	\$116,031.00

WATER WORKS DEPARTMENT

Real Estate

	Value Bldgs.	Area	Right of way	Value Land	Total Value
Terminal Chamber (brick) Conduit St.	\$ 4,400.00				\$ 4,400.00
2 Small Brick Buildings, manhole and blow-off, Conduit St.	1,100.00		"		1,100.00
Sarah Ave. and Moody St.	1,100.00	28,072	sq. ft.	\$ 2,800.00	2,800.00
Brick Manhole Structure, White St.		5,833	"	300.00	1,400.00
Brick Manhole Structure, Moody St., Ger-shorn and Gardner Aves.	2,200.00	17,252	"	2,600.00	4,800.00
Fels Park		27,163	"	550.00	550.00
Boulevard and Boulevard St.		11	"	1,550.00	12,550.00
Inlet Chamber (brick) Varnum Ave.	11,000.00	15,540	acres	4,400.00	4,400.00
Pumping Station, West Sixth St.	110,000.00				
Stable and Sheds	16,500.00				
Store House and Sheds, West Sixth St., Hampshire St. and Jewett St.	2,200.00	51,101	sq. ft.	13,000.00	141,700.00
High Service Reservoir, Mt. Pleasant St.	16,500.00	54,730	"	1,100.00	18,250.00
In Town of Dracut		32,470	"	650.00	
Pumping Station and Chimney, Plain and Cheimsford Sts.	3,300.00	1,684,930	"	25,250.00	
Plain and Cheimsford Sts.		115,640	"	600.00	33,000.00
In Town of Cheimsford		1,531,109	"	3,850.00	
Low Service Reservoir (new)	82,500.00				
Low Service Reservoir	77,000.00				
Dwelling House	1,100.00				
Gate House, Beacon St.	11,000.00	651,600	"	32,600.00	204,200.00
Lower Pumping Station	27,500.00				

WATER WORKS DEPARTMENT, Real Estate--Continued

	Value Bldgs.	Area	Value Land	Total Value
Wooden Building, Boulevard,	550.00	22.71 acres	9,100.00	37,150.00
Filter Basin (brick base and wood super- structure)				
Vacant Land between River and Varnum Ave.	8,800.00	(Balance of land gone to Bath House)		
Cushing Farm Buildings (sold since April 1, 1920)		101.882 sq. ft.	3,050.00	11,850.00
Upper Pumping Station (sold since April 1, 1920)				
Dwelling House (sold since April 1, 1920) ..	900.00	55.78 "	22,300.00	22,300.00
Dwelling House (so'd since April 1, 1920)	125,000.00	34.71 "	13,900.00	138,900.00
Purification Plant				
	\$501,750.00		\$137,600.00	\$639,350.00

Personal Property

Pumps, Engines, Machinery, Pipes, Conduits, Mains
and other Personal Property\$1,602,276.67

FIRE DEPARTMENT

Personal Property

	Valuation
Chief's Office	\$ 7,619.32
Repair Shop	579.00
Engine Co. No. 1, Gorham Street	8,767.13
" No. 2, Branch Street	9,389.00
" No. 3, Palmer Street	7,773.30
" No. 4, High Street	5,172.50
" No. 5, Mammoth Road	2,950.90
" No. 6, Fletcher Street	6,592.60
Hose Co. No. 7, Central Street	2,566.95
" No. 8, Merrimack Street	2,000.85
" No. 9, Lincoln Street	2,539.13
" No. 10, Fourth Street	3,955.30
" No. 11, Lawrence Street	1,966.60
" No. 12, West Sixth Street	2,433.65
Hook and Ladder, No. 1, Lawrence Street	2,429.25
" No. 2, Westford Street	3,517.91
" No. 3, Palmer Street	5,169.55
" No. 4, West Sixth Street	6,599.78
Protective No. 1, Warren Street	4,327.70
Fire Alarm Telegraph	47,327.00
Total Fire Dept. Personal	<u>\$133,647.42</u>

FIRE DEPARTMENT

Real Estate

	Value Bldgs.	Area	Value Land	Total Value
Engine House, Gorham St.	\$ 31,000.00	5,292 feet	\$ 1,600.00	\$ 32,600.00
Engine House, Branch St.	21,600.00	8,829 "	3,500.00	25,100.00
Central Fire Station, Palmer St.	72,000.00	2,248 }	9,000.00 }	128,600.00
		7,326 }	47,600.00 }	
Engine House, High St.	30,000.00	5,565 "	1,950.00	31,950.00
Engine House, Mammoth Road	17,400.00	5,341 "	850.00	18,250.00
Engine House, Fletcher St.	24,000.00	123,126 }	24,600.00 }	52,300.00
		18,985 }	3,700.00 }	
Engine House, Central St.	12,600.00	3,500 "	2,100.00	14,700.00
Engine House, Merrimack St.	27,600.00	3,060 "	11,300.00	38,900.00
Engine House, Lincoln St.	7,200.00	1,930 "	150.00	7,350.00
Engine House, Fourth St.	19,200.00	6,993 "	2,500.00	21,700.00
Engine House, Lawrence St.	30,000.00	8,058 "	1,200.00	31,200.00
Engine House, West Sixth St.	45,600.00	9,390 "	650.00	46,250.00
Engine House, Westford St.	21,600.00	4,610 "	1,400.00	23,000.00
Engine House, Warren St.	13,200.00	1,645 "	1,650.00	14,850.00
	\$373,000.00		\$113,750.00	\$486,750.00

SCHOOL DEPARTMENT

Real Estate

	Bldgs. Value	Area sq. ft.	Land Value \$	Total Value \$
Land, Kirk and Anne Sts.	\$240,000.00	72,140	72,135.00	\$ 72,135.00
High School, Kirk and Anne Sts.		31,194	32,000.00	272,000.00
High School Annex, John and Paige Sts.	98,800.00	16,737	25,100.00	123,900.00
High School (overflow) Kirk St.	12,000.00	22,816	18,000.00	30,000.00
Bartlett School (new) Wannalancit St.	175,000.00	68,418	10,250.00	185,250.00
Land, Clark St.		10,000	3,000.00	3,000.00
Butler School, Gorham St.	78,000.00	43,187	9,315.00	87,315.00
Colburn School, Lawrence St.	24,000.00	17,557	3,500.00	27,500.00
Edson School, Highland and South Sts.	24,000.00	L.d. taken with So. Common		24,000.00
Franklin School, Branch St.	18,000.00	20,011	14,000.00	32,000.00
Green School, Merrimack St.	72,000.00	19,562	83,150.00	155,150.00
Greenhalge School, Ennell St.	150,000.00	100,000	15,000.00	165,000.00
Morey School, Pine St. (unfinished)	120,000.00	123,924	18,600.00	138,600.00
Lincoln School, Chelmsford St.	120,000.00	48,084	4,800.00	124,800.00
Mann School, Broadway (brick)	9,600.00			
Wooden Building, Broadway	9,600.00	15,632	11,700.00	30,900.00
Moody School (new) Rogers St.	90,000.00	51,070	10,200.00	100,200.00
Pawtucket School, Mammoth Road	140,000.00	36,160	5,800.00	145,800.00
Riverside School, Woburn St.	30,000.00	33,900	1,350.00	
		3,550	150.00	31,600.00
		11,724	100.00	
Varnum School, Myrtle St.	120,000.00	47,625	10,950.00	130,950.00
Washington School, Lang St.	108,000.00	72,240	2,890.00	110,890.00
Agawam School, Agawam St. (Primary)	9,600.00	13,184	1,600.00	11,200.00
Ames St. Primary	14,400.00	8,539	2,500.00	16,900.00
Billings St. Primary	18,000.00	20,000	1,000.00	19,000.00

SCHOOL DEPARTMENT. Real Estate— Continued

	Value Bldgs. \$	Area sq. ft.	Land Value	Total Value
Central St. Primary	12,000.00	9,694	2,900.00	14,900.00
Cabot St. Primary	24,000.00	9,625	5,300.00	29,300.00
Carter St. Primary	60,000.00	18,908	2,650.00	62,650.00
Charles St. Primary	14,000.00	11,100	4,450.00	18,450.00
Colburn Primary, Charles St.	26,000.00	9,857	3,450.00	29,450.00
Cross St. Primary	26,000.00	8,048	2,000.00	28,000.00
Dover St. Primary	10,000.00	17,927	4,500.00	14,500.00
Favor St. Primary	26,500.00	8,500	5,100.00	31,600.00
Fayette St. Primary	2,400.00	7,428	2,600.00	5,000.00
Grand St. Primary	3,600.00	4,255	1,300.00	4,900.00
High St. Primary	9,600.00	9,220	3,700.00	13,300.00
Howard St. Primary	4,200.00	6,944	1,400.00	5,600.00
Kirk St. Primary	14,400.00	6,120	6,100.00	20,500.00
Lakeview Ave. Primary	9,000.00	10,232	2,000.00	11,000.00
Lexington Ave. Primary	8,400.00	12,000	350.00	8,750.00
London St. Primary	5,000.00	10,065	700.00	5,700.00
Lyon St. Primary	21,600.00	10,730	2,700.00	24,300.00
House 16 Lyon and School Building	3,000.00	6,000	1,000.00	4,000.00
Mannoth Road Kindergarten	2,400.00	3,507	1,100.00	3,500.00
Middlesex Village Primary	19,000.00	19,120	750.00	19,750.00
Moody Street	21,600.00	30,400	1,200.00	22,800.00
Morrill School, Common Street	25,000.00	9,040	3,150.00	28,150.00
Laura E. Lee School	24,500.00	16,239	2,450.00	26,950.00
Powell St. School	7,800.00	11,367	1,350.00	9,150.00
Pond St. School	8,500.00	9,880	3,950.00	12,450.00
Pine St. School	21,600.00	26,603	3,200.00	24,800.00
Sycamore St. School	14,500.00	19,046	550.00	15,050.00

SCHOOL DEPARTMENT, Real Estate—Continued

	Value Bldgs.	Area	Land Value	Total Value
Tenth St. School	10,500.00	10,730	2,150.00	12,650.00
Weed St. School	12,000.00	18,903	"	13,900.00
West London St. Annex Primary	2,500.00	15,211	1,900.00	3,250.00
West Sixth St. Primary	8,500.00	12,913	1,900.00	10,400.00
Worthen St. Primary	24,000.00	11,044	8,300.00	32,300.00
	\$2,163,100.00		\$441,990.00	\$2,605,090.00

SCHOOL DEPARTMENT—Personal Property

Furniture in Schools, etc. \$54,300.00
Determined on factor basis of a certain valuation per room.

MISCELLANEOUS REAL ESTATE

	Area		Bldgs. Value
Tenth Street in Lowell	40,260	sq. ft.	\$ 800.00
Tenth Street in Dracut	175,985	"	3,500.00
Harris Land in Dracut	28	acres	600.00
Parker Land in Dracut	20	"	1,400.00
Hildreth Land in Dracut	17	"	500.00
Meadow Land in Dracut	5	"	275.00
Swan Land in Dracut	5	"	200.00
S. S. Rogers St.	269	"	300.00
N. S. First Street	57,768	sq. ft.	1,500.00
W. S. Billerica Road	145,413	"	400.00
Spruce St.	17,457	"	150.00
Clark Road	3	acres	900.00
			<hr/>
			\$ 10,525.00

CEMETERIES DEPARTMENT

Various tools and supplies		\$ 8,027.73
Fencing:		
Edson Cemetery	\$7,355.00	
Gates	2,500.00	
Westlawn	3,000.00	
Old English	1,000.00	
School Street (stone)	1,500.00	
Pawtucketville	170.00	15,525.00
Chapel:		
(Stone, slate roof)		4,000.00
Settees		100.00
3 Chairs		10.00
1 Desk		5.00
1 Bible		3.00
4 Gas Heaters		25.00
1 Pedestal		28.00
Receiving Tomb		1,000.00
Office Building and Waiting Room (wooden)		3,500.00
Heating Plant		200.00
6 Chairs		8.00
3 Desks		85.00
2 Tables		15.00
1 Book Case		25.00
1 Clock		5.00
1 Mirror		1.00
1 Safe (vault)		200.00
1 Typewriter		25.00
1 Filing Cabinet		175.00
Rest Shelter:		
Westlawn—(Cement and Tile)		1,000.00
		<hr/>
		\$ 33,962.73

LOANS NEGOTIATED BY THE CITY SINCE 1900 AND HOW EXPENDED

Year	Loans	Improvements	Current Expenses	Waterways
1900	\$288,500.00	\$191,000.00	\$ 22,500.00	\$ 75,000.00
1901	256,100.00	206,100.00	50,000.00	
1902	222,885.00	186,385.00	36,500.00	
1903	387,320.00	183,820.00	203,500.00	
1904	254,414.00	167,714.00	86,700.00	
1905	360,150.00	232,150.00	128,000.00	
1906	247,460.00	149,440.00	71,000.00	27,000.00
1907	365,500.00	229,500.00	136,000.00	
1908	304,413.00	189,413.00	115,000.00	
1909	172,900.00	172,900.00	none	
1910	241,000.00	161,000.00	20,000.00	60,000.00
1911	412,450.00	251,450.00	61,000.00	100,000.00
1912*	546,700.00	230,700.00	241,000.00*	75,000.00
1913	542,700.00	320,700.00	147,000.00	75,000.00
1914	343,500.00	235,500.00	none	90,000.00
1915	493,000.00	34,300.00	none	150,000.00
1916	647,100.00	592,100.00	none	55,000.00
1917	780,000.00	780,000.00	none†	
1918	177,000.00	147,000.00	30,000.00	
1919	833,000.00	753,000.00	none	80,000.00
1920	1,487,000.00	1,472,000.00	none	15,000.00

*Temporary Loan Deficiencies of previous years—\$200.00.

†\$15,000.00—Spanish Influenza Epidemic; \$15,000.00 German War.

EXPENDITURE, TAX RATE VALUATION FROM 1860

Year	Expenditures	Tax Rate	Total City Valuation
1860	\$ 267,192.07	\$ 8.40	\$ 22,125,176.00
1865	756,342.81	14.60	21,076,360.00
1870	778,636.03	13.90	25,972,488.00
1875	1,162,922.95	16.20	38,690,495.00
1880	1,398,683.48	16.20	41,102,016.00
1885	1,833,483.69	16.20	51,351,780.00
1890	3,613,584.04	16.00	62,353,612.00
1895	2,903,410.60	18.00	68,885,732.00
1900	2,353,844.41	18.80	71,529,515.00
1905	2,738,502.84	20.20	71,645,718.00
1906	2,795,000.75	19.60	74,945,640.00
1907	2,718,874.34	19.40	76,079,750.00
1908	3,046,987.96	20.40	77,855,891.85
1909	2,791,607.95	19.60	79,695,960.00
1910	2,887,399.24	19.60	80,392,890.00
1911	2,873,195.26	18.90	82,772,900.00
1912	2,847,482.13	19.00	85,384,085.00
1913	3,112,853.71	19.40	87,872,600.00
1914	3,093,197.15	21.90	90,039,890.00
1915	3,207,407.84	20.80	82,954,197.00
1916	3,443,043.82	21.20	94,503,423.00
1917	3,835,043.80	23.40	90,820,901.50
1918	4,026,944.67	23.80	98,774,850.00
1919	4,462,739.28	26.00	107,269,813.00
1920	7,452,446.61	27.20	123,803,827.00

DEBT MATURING IN 1921

Department	Date of Loan	Rate	Amount of Loan	Amount Maturing
High School }	April 1, 1891	4	\$150,000.00	Sinking Fund
School Houses }	May 1, 1911	4	50,000.00	\$ 5,000.00
Sewer Construction	June 1, 1911	4	118,500.00	11,850.00
Paving, Macadamizing, etc.	July 1, 1911	4	44,000.00	4,400.00
Shedd Park, Department }	September 1, 1911	4	23,500.00	2,350.00
Deficiencies, Fire Houses }	December 1, 1911	4	73,450.00	7,345.00
Bridge Repairs, Schools }	May 1, 1916	4	61,000.00	12,200.00
Streets, Sewers }	April 1, 1919	4½	6,000.00	3,000.00
Department Deficiencies }	September 1, 1919	4½	4,000.00	2,000.00
Macadamizing				
New Sidewalks				
New Sidewalks				

WATER WORKS DEBT

New Engine, New Reservoir	August 1, 1911	4	\$100,000.00	\$ 10,000.00
Extension Mains and Equipment	May 1, 1916	4	55,000.00	11,000.00

HIGH STREET CHURCH CLOCK

It was to be paid for by popular subscription, but after some time Mr. Hedrick was obliged to make the final payments and it became his property. In 1877 the City Government, by resolution, purchased the clock of Mr. Hedrick. The terms of purchase required the City to keep it in repair at the High Street Church.

COST OF CITY HALL AND MEMORIAL BUILDING

1889-1895—Cost of City Hall	\$382,317.48
1889-1895—Cost of Memorial Building	175,928.45
Land and Curbing	17,219.43
Total	<u>\$575,465.36</u>

PAYMENTS MADE TO SINKING FUNDS IN 1920

City Hall and Memorial Buildings, due 1920	} \$ 75,000.00	\$ 450,000.00
High School, due 1921		200,000.00
New School Houses, due 1926		150,000.00
Water Loans, due 1920		1,000,000.00
	\$ 91,000.00	<u>\$1,800,000.00</u>

PROPERTY EXEMPT FROM TAXATION

Literary Institutions	\$ 140,846.90	\$ 466,895.00	\$ 697,641.90
Benevolent Institutions	35,423.62	97,750.00	133,173.62
Temperance Institutions	3,365.85	16,350.00	19,715.85
Charitable Institutions	873,222.67	487,440.00	1,360,662.77
Scientific Institutions	406,420.29	486,650.00	893,070.29
Houses of Religious Worship		2,322,750.00	2,322,750.00
	<u>\$1,459,279.43</u>	<u>\$3,877,835.00</u>	<u>\$5,327,114.43</u>
The total real estate area exempt, 115,806.1000 acres.			

Jonathan Tyler Worthy Poor Trust Fund

Deposited with the Washington Inst. for Savings, Book No. 23549.

Amount on deposit, Jan. 1, 1918 \$10,000.00
 Resolutions, numbered 14 and 74, passed by the City Council, May, 1878:
 "That the City of Lowell be appointed trustee of the sum of \$10,000.00, and that the City Treasurer is authorized to pay to the Ministry-at-Large the interest of said sum at the rate of 6 per cent. forever. Said sum to be used for the benefit of the worthy poor of the City. Said Ministry shall make an annual report of their dispensing said money to the City Council." This fund was restored in 1914, and City is paying 4 per cent only.

Thomas Nesmith Fund

\$25,000.00 Annual Interest, \$1,500.00

Resolution, numbered 57, passed by the City Council, November, 1870: "That the sum of \$25,000.00 be accepted by the City and that the interest, at the rate of 6 per cent., be paid to the trustees, and that they in turn pay to the Ministry-at-Large or to like people, as they may decide. Said sum to be used for people in temporary need of charity without distinction of race, color or religion. Trustees: A. K. Chadwick, A. G. Cumnock, Thos. Nesmith, G. R. Chandler, Treasurer. In case of a vacancy, the remaining trustees shall report to the Justices of the Court who shall appoint a successor to fill said vacancy." Not a trust fund.

Carney Medal Fund

Received of James G. Carney, in 1858 and 1859, the amount of \$200, which is to remain a perpetual debt of the City forever; the interest to be applied in payment for the "Carney Medals" to the departments of the High School (annually).

For the information of the citizens of Lowell the Auditor respectfully refers them to the "Annual Report of the School Committee," for the year 1859, where all the correspondence between the donor and the recipient may be found.

Thomas Nesmith Fund

\$1,000.00 Annual Interest \$60.00

Resolution, numbered 54, passed by the City Council, April, 1870: "That the City of Lowell be appointed trustee of the sum of \$1,000.00, and the City Treasurer is authorized to pay to the High Street Church the interest of said sum at the rate of 6 per cent. forever. Said sum to be used by the Pastor and Deacons of said Church to sustain the Sunday School and its library for the moral and religious instruction of the children." Not a trust fund.

MEMORIAL AUDITORIUM

	Credit
June 1, 1919, Loan	\$140,000.00
Cash received for rentals during 1919	1,242.05
Sept. 5, 1919, Cash received for sale buildings	3,698.00
Interest on bank balances during 1919	289.00
January, 1920, Transfer	189.29
May 1, 1920, Loan	200,000.00
September 1, 1920, Loan	200,000.00
Cash received for rentals during 1920	411.00
Interest on bank balances during 1920	71.63
	<hr/>
	\$545,900.97

Expenses	Debit
Labor	\$ 59.97
Architectural Services	33,001.64
Contracts	233,254.12
Land and Buildings	127,443.73
Services	250.00
Transfers	189.29
All Other Expenses	582.56
	<hr/>
Balance based on authorized and negotiated loans	\$151,119.66

NEW HIGH SCHOOLS

	Credit
Loans :	
November 1, 1915	\$ 125,000.00
February 1, 1916	100,000.00
March 1, 1917	75,000.00
April 1, 1920	300,000.00
September 1, 1920	400,000.00
Receipts (Sale Buildings)	4,542.50
	<hr/>
	\$1,004,542.50

Expenses	Debit
Architect	\$ 39,374.01
Auctioneer	338.85
Contract	415,035.03
Contract	8,163.93
Land	181,414.16
Steel	73,016.97
All Other Expenses	15,159.69
	<hr/>
	\$ 732,502.64
Balance based on authorized and negotiated loans	<hr/>
	\$ 272,039.86

REPORT OF AN AUDIT
OF THE
ACCOUNTS
FOR THE
CITY OF LOWELL
YEAR ENDING
DECEMBER 31, 1920

MADE BY

EVERETT E. TARBOX

CERTIFIED MUNICIPAL ACCOUNTANT

EVERETT E. TARBOX

EXPERT MUNICIPAL ACCOUNTANT

Office
101 Tremont Street
Room 410
Boston, Mass.,

Telephone
Main 2365

HON. JAMES E. DONNELLY,
Commissioner of Finance,
of the City of Lowell, Mass.

SIR:—

I have to report the completion of an audit of the Municipal accounts of the City of Lowell, covering the financial transactions of the year 1920 in all of its departments, in accordance with the provisions of Section 35, of the City Charter.

The financial records of every City Department were examined, checked, added and verified, and compared with the ledgers kept by the City Auditor's office; and a proof obtained of the entire cash receipts and disbursements of the City Treasurer during the fiscal year of 1920, as recorded on his cash books.

All bills made out by any department for services rendered or for materials furnished were listed and checked to the departmental records, and collections were checked with the records of the City Treasurer's office.

The difference between these two amounts was proved by listing the unpaid bills due the City at the end of the year, and comparing same with the accounts kept by the City Auditor.

This method insures the City against loss of revenue from departmental accounts receivable; because all money due the City from this source must be collected or legally abated, before they can be taken from the City Auditor's Ledgers. The correctness of these accounts was proven by the annual audit, just completed.

Outstanding Taxes and Special Assessments were listed, and the total amount of each year's levy was proved by comparison with the records of the City Auditor's ledger, and the records of abatements kept by the Assessors' Office.

All disbursements of cash made by the City Treasurer must, of course, bear the signed approval of the departmental heads, and the signed authorization of a majority of the Municipal Council; therefore, it is a simple matter to prove the correctness of the Treasurer's payments by checking the bills paid to the authorized Treasury Warrants, made by the Auditor, and comparing the total amount of the Warrants with the total cash payments made by the Treasurer during the year.

A municipal audit, to be successful, must do more than this. It must conserve the assets of the City, and prove that all of its income is collected. This is a more difficult task, and without an excellent accounting system this would be impossible.

The automatic checks provided by the present accounting system in the Auditor's Ledgers will insure the City against loss of revenue, if the annual audit is properly conducted.

I can assure you that all revenue due the City has been collected, with the exception of the outstanding bills due at the time of the last audit, as listed by me and proved.

A summary of the financial operations of the various departments, covering the transactions of the entire fiscal year of 1920, as examined and proved, is herewith presented, including Trust Funds and Sinking Funds.

A Balance Sheet, made from audited figures, is appended to this report, showing the true financial condition of the City on December 31st, 1920, including both its Revenue and Non-Revenue assets and liabilities.

Mayor and Municipal Council:—Appropriations, transfers of appropriations and Loans Authorized during the year 1920 were listed from the official records of the City Clerk, and checked to the Auditor's Journal and General Ledger. These were found to have been correctly entered, as voted by the Council.

Loans Authorized during the year 1920 were 17 in number, and the total amount authorized was \$2,137,000.00. Following is a detailed summary of all loans authorized during the year 1920:—

Date	Purpose	Amount
January 24—	Water Extension and Equipment	\$ 15,000.00
January 27—	Sewer Construction	50,000.00
March 20—	High School Construction	400,000.00
March 20—	High School Construction	600,000.00
March 20—	High School Construction	750,000.00
March 27—	Street Paving	80,000.00
March 27—	Street Macadamizing	40,000.00
April 10—	Sidewalk Construction	10,000.00
April 24—	Bridge Construction	20,000.00
June 28—	Bridge Construction	72,000.00
July 24—	School Construction	10,000.00
August 21—	Sidewalk Construction	6,000.00
August 21—	Land for Parks	12,000.00
August 21—	Widening Locke Street	12,000.00
September 18—	Sewer Construction	20,000.00
October 9—	Street Macadamizing	20,000.00
November 22—	Sewer Construction	20,000.00
		<hr/>
		\$2,137,000.00

All of the Loans Authorized, as listed above, were issued during the year, with the exception of the total amount authorized for High School Construction. For this purpose, only \$700,000.00 was borrowed. In addition \$400,000.00 was borrowed for Auditorium Construction, making the total amount borrowed during the year \$1,487,000.00.

The loan authorized for building the Auditorium was May 20, 1919, amounted to \$1,000,000.00, and there was \$140,000.00 borrowed during 1919. Therefore, the Loans Authorized and not issued on December 31, 1920 were:—

High School Construction	1,050,000.00
Auditorium	460,000.00
Total	<u>\$1,510,000.00</u>

The total appropriations from revenue, ordered by the Municipal Council during the year, were as follows:—

Annual Budget	3,468,350.00
Additional Appropriations from Revenue	166,324.00
State & County Taxes and Assessments	550,373.02
Cash Receipts Appropriated for Revenue	<u>29,438.13</u>

Total Appropriations for Expenses	<u>\$4,214,485.15</u>
---	-----------------------

This total does not include the receipts of the Water and Cemetery Departments, which departments are supposed to be self-supporting. The receipts appropriated for their use were as follows:—

Water Department	\$371,942.08
Cemetery Department	<u>36,554.52</u>

Mayor's Department:—The receipts for the issuance of licenses for Sunday Concerts, for which this office is directly responsible, amounted to \$3,688.00, and this amount was paid to the Treasurer, and duly reported to the City Auditor.

Auditor's Department:—The books and accounts kept by this office during the year were checked, added and verified.

The appropriation ledger was checked in detail, and the total transactions of every department and account were listed, showing appropriations, receipts credited to appropriations, transfer credits and debts, both municipal and departmental; payments of cash, and the appropriation balances of each account at the end of the fiscal year.

By this method a proof was obtained that the orders of the Municipal Council had been carried out, and that no money had been paid out except such as had been duly authorized by the Council.

The Treasurer's records were found to be in agreement with the payments as shown on the Auditor's appropriation ledger, and the correctness of this book was proven by the controlling account in the General Ledger.

The General Ledger was examined and checked in detail, and a trial balance drawn from same proved to be correct and in balance.

The Accounts Receivable Ledger, showing the details of all departmental accounts receivable, was examined and checked. The outstanding accounts were listed and verified and found to agree with the controlling account in the General Ledger.

At the end of the financial year, which, according to Section 32 of the City Charter, ends with the last day of December of each calendar all unexpended revenue appropriation balances should be closed and the amount of all such balances credited to the revenue surplus account of City.

The following table shows a classified summary of the total cash receipts and the total revenue and non-revenue payments made by the Treasurer's office during the year, as proved by the examination of the records of all other departments, and checked to the books of the City Auditor.

The addition to these totals, of the cash on hand at the beginning and end of the fiscal year, reveals a proof of the total cash transactions of the Treasurer's office, and of his cash balance at the end of the year 1920.

CITY OF LOWELL

Summary of Cash Receipts and Payments, 1920.

RECEIPTS		PAYMENTS	
Taxes	\$3,255,652.61	Revenue Appropriations	\$ 6,107,011.66
Taxes from State	549,203.16	Non-Revenue Appropriations	1,269,553.32
Tax Titles, Redeemed	994.68	Temporary Tax Loans	2,600,000.00
Licenses and Permits	14,614.05	Tax Titles Purchased	298.49
Fines and Forfeits	9,783.06	Trust Funds	14,325.00
Grants and Gifts	7,072.47		
Special Assessments	36,410.35		
General Government	4,347.88		
Protection of Persons and Property	21,975.47		
Health and Sanitation	8,523.48		
Highways	2,358.08		
Charities	13,181.78		
Soldiers' Benefits	19,002.55		
Education	34,786.97		
Recreation and Unclassified	5,410.46		
Public Service Enterprises	372,011.63		
Cemeteries	18,659.02		
Interest	65,062.86		
Indebtedness	4,498,558.80		
Agency and Trust	1,464,325.00		
Refunds	5,854.82		
Total Receipts	\$10,407,789.18	Total Payments	\$ 9,991,188.47
Cash on hand January 1st, 1920	392,658.61	Cash on hand December 31st, 1920	809,259.32
	<u>\$10,800,447.79</u>		<u>\$10,800,447.79</u>

Treasurer's Department:— The books of the Treasurer's and Collector's office were examined, checked and verified, and all cash transactions were compared with the Auditor's ledgers.

Cash receipts were proven by auditing the financial records of all other City Departments, in comparison with the books of the City Auditor, including both receipts collected by the Treasurer and Collector in payment of Accounts Receivable, and also collections made by other departments direct and for which no bills were sent out. This latter item, includes fees for Licenses and Permits, and cash payments for departmental services.

The accounting records were found to be in excellent condition, and easily proved. The financial transactions of this office are handled in an efficient and systematic manner, with the result that correct information regarding the public finances of the City is readily obtainable.

The cash in the Treasurer's office was personally counted and balanced on January 24th, 1921, and a reconciliation effected back to January 1st, 1921, as follows:—

Cash in Drawer	\$	2,118.30
Cash in Safe		6,959.33
Cash in Banks (per Treasurer's Cash Book) :		
Lowell Trust Co.	\$	112,139.24
Union National Bank	\$	112,689.48
Old Lowell National Bank		112,585.22
Middlesex Trust Co.		112,627.78
Appleton National Bank		112,793.13
Wamesit National Bank		111,913.97
Old Lowell National Bank (Special)		375.42
First National Bank of Boston		957.08
		<hr/>
	\$	676,081.32
Cash Balance, Janary 24th, 1921	\$	685,158.95

RECONCILIATION

Cash on hand, January 1st, 1921	\$	809,259.32
Receipts, January 1 to 24, 1921		216,481.85
Payments, January 1 to 24, 1921	\$	340,582.22
Cash on hand, January 24th (as counted)		685,158.95
		<hr/>
	\$1,025,741.17	\$1,025,741.17

PROOF OF BANK BALANCES

January 1st, 1921.

Depository	Bank Statement	Treasurer's Books	Outstanding Checks	Dec. Int. Credited in Jan.
Lowell Trust Co.	\$101,778.12	\$101,476.29	\$	301.83
Union Nat. Bank.....	256,384.34	256,317.96		66.38
Old Lowell Nat. Bank ..	122,112.36	122,111.36		1.00
Middlesex Trust	165,560.46	162,781.14	2,779.32	
Appleton Nat. Bank	102,793.13	102,793.13		
Wamesit Nat. Bank	102,913.97	102,913.97		
First Nat Bank	18,056.72	18,041.75		\$ 14.97
Old Lowell Nat. Bank ...	375.42	374.93		.49
	<hr/>	<hr/>	<hr/>	<hr/>
	\$869,974.52	\$866,810.53	\$	3,148.53
		3,148.53		
		15.45		
	<hr/>	<hr/>	<hr/>	<hr/>
	\$869,974.52	\$869,974.52		

RECONCILIATION OF BANK ACCOUNTS

Depository	Bank Balances January 1, 1921	Deposits Jan. 1, - 24	Checks Drawn Jan. 1, - 24	Treasurer's Balance Jan. 24
Lowell Trust Co.	\$101,476.29	\$ 28,000.00	\$ 17,337.05	\$112,139.24
Union Nat Bank	256,317.96	27,895.32	171,523.80	112,689.48
Old Lowell Nat. Bank ..	122,111.36	240,473.86	250,000.00	112,585.22
Middlesex Trust Co.	162,781.14	200,002.16	250,155.52	112,627.78
Appleton Nat. Bank	102,793.13	28,000.00	18,000.00	112,793.13
Wamesit Nat. Bank	102,913.97	28,000.00	19,000.00	111,913.97
First National Bank of Boston	18,041.75	14.97	17,099.64	957.08
Old Lowell Nat. Bank ..	374.93	.49	.	375.42
	\$866,810.53	\$552,386.80	\$743,116.01	\$676,081.32
	552,386.80		676,081.32	
	<u>\$1,419,197.33</u>		<u>\$1,419,197.33</u>	

The following table shows the entire receipts and disbursements of the City Treasurer's office during the year 1920, by months, and the total amounts added to the cash on hand at the beginning and end of the year, prove that the balances are correct.

Months	Receipts	Payments
January	\$ 173,110.22	\$ 247,212.51
February	356,970.02	372,460.44
March	536,184.68	581,636.65
April	760,937.97	502,841.57
May	834,223.54	783,876.76
June	530,089.62	514,388.60
July	309,835.84	531,731.52
August	729,088.43	662,279.01
September	740,032.92	399,596.67
October	3,261,800.97	2,387,624.52
November	1,208,156.18	1,785,074.63
December	967,358.79	1,222,465.59
	<u>\$10,407,789.18</u>	<u>\$9,991,188.47</u>
Cash on hand Jan. 1, 1920	392,658.61	
Cash on hand Dec. 31st, 1920		809,259.32
	<u>\$10,800,447.79</u>	<u>\$10,800,447.79</u>

AUDITOR'S REPORT

157

The following tables show a summary of the transactions during the year, on account of taxes, street sprinkling, moth, sewer and sidewalk assessments, including cash receipts, abatements, and the uncollected accounts December 31st, 1920, and a proof of same.

Outstanding taxes, including moth and street sprinkling assessments, were verified by mailing notices to a representative list of over 300 delinquent tax payers, asking for a verification of the charges outstanding against them.

Five of these notices were returned, unopened. All replies received proved that none of the outstanding accounts on the books of the Collector had been paid, and that the accounts were correct.

TAXES 1915.

Uncollected, Jan.1 1920 (per Auditor's Ledger) \$	1,069.64
No collections, no abatements.	
Uncollected Dec. 31, 1920 (per detailed list)	1,069.64

STREET SPRINKLING 1915.

Uncollected, Jan. 1, 1920 (per Auditor's Ledger) \$	14.55
No collections, no abatements.	
Uncollected, Dec. 31, 1920 (per detailed list)	14.55

TAXES 1916.

Uncollected, Jan. 1, 1920 (per Auditor's Ledger)		\$ 8,689.64
Collections, Jan. 1, to Dec. 31, 1920	\$ 2.00	
Uncollected, Dec. 31, 1920 (per detailed list)	8,687.64	
	<hr/>	<hr/>
	\$ 8,689.64	\$ 8,689.64

TAXES 1917.

Uncollected, Jan. 1, 1920 (per Auditor's Ledger)		\$ 14,741.89
Collections, Jan. 1 to Dec. 31, 1920	\$ 399.49	
Abatements, Jan. 1 to Dec. 31, 1920	14,336.40	
Uncollected, Dec. 31, 1920 (per detailed list)	6.00	
	<hr/>	<hr/>
	\$ 14,741.89	\$ 14,741.89

MOTH 1917.

Uncollected, Jan. 1, 1920 (per Auditor's Ledger)	\$	13.85
Abatements, Jan. 1 to Dec 31, 1920		13.85

AUDITOR'S REPORT

TAXES 1918.

Uncollected, Jan. 1, 1920 (per Auditor's Ledger)		\$194,229.05
Collections, Jan. 1 to Dec. 31, 1920	\$178,305.92	
Abatements Jan. 1 to Dec. 31, 1920	465.59	
Uncollected Dec. 31, 1920 (per Auditor's Ledger)	15,457.54	
	<hr/>	<hr/>
	\$194,229.05	\$194,229.05

Proof.

Uncollected, Jan. 21, 1921 (as per detailed list)	\$ 15,508.64	
Collections, Jan. 1 to 31, 1921	2.00	
	<hr/>	
	\$ 15,510.64	
Less overpayments, as per list	\$14.51	
Undetected error	38.59	
	<hr/>	
		53.10
		<hr/>
Uncollected Dec. 31, 1920 (per Auditor's Ledger)	\$ 15,457.54	

STREET SPRINKLING 1918.

Uncollected Jan. 1, 1920 (per Auditor's Ledger)		\$ 3,204.73
Collections, Jan. 1 to Dec. 31, 1920	\$ 3,202.33	
Abatements Jan. 1 to Dec. 31, 1920	3.59	
Overpayment, Dec. 31, 1920 (per Auditor's Ledger)		1.19
	<hr/>	<hr/>
	\$ 3,205.92	\$ 3,205.92

Proof.

Uncollected Jan. 1, 1921 (per detailed list)	\$.81	
Overpayment (per Auditor's Ledger)	1.19	
Undetected error		\$ 2.00
	<hr/>	<hr/>
	\$ 2.00	\$ 2.00

MOTH 1918.

Uncollected, Jan. 1, 1920 (per Auditor's Ledger)		\$ 392.10
Collections, Jan. 1 to Dec. 31, 1920	\$ 390.10	
Abatements Jan. 1 to Dec. 31, 1920 .....	.40	
Uncollected, Dec. 31, 1920 (per detailed list)	1.60	
	<hr/>	<hr/>
	\$ 392.10	\$ 392.10

TAXES 1919.

Uncollected, Jan. 1, 1920 (per Auditor's Ledger)		\$580,469.57
Collections, Jan. 1 to Dec. 31, 1920	\$354,056.31	
Abatements, Jan. 1 to Dec. 31, 1920	6,527.50	
Uncollected, Dec. 31, 1920 (per Auditor's Ledger)	\$219,885.76	
	<hr/>	<hr/>
	\$580,469.57	\$580,469.57

AUDITOR'S REPORT

159

Proof.

Uncollected, Jan. 25, 1921 (per detailed list)	\$195,931.96
Collections, Jan. 1 to 25, 1921	23,967.75
Undetected error	12.05
	<hr/>
	\$219,911.76
Less overpayments, as per list	26.00
	<hr/>
Uncollected, Dec. 31, 1920 (per Auditor's Ledger)	\$219,885.76

STREET SPRINKLING 1919.

Uncollected, Jan. 1, 1920 (per Auditor's Ledger)....	\$	7,192.07
Error in addition of tax receipt book, Oct. 16, 1919, corrected in year 1920		9.00
Collections, Jan. 1 to Dec. 31, 1920	\$	4,129.77
Uncollected, Dec. 31, 1920 (per Auditor's Ledger)		3,071.30
	<hr/>	<hr/>
	\$	7,201.07
	\$	7,201.07

Proof.

Uncollected, Jan. 24, 1921 (per detailed list)	\$	2,745.09
Collections, Jan. 1 to 24, 1921		326.11
Error in addition of tax receipt book Oct. 11, 1919, corrected in 1921 .....		.10
	<hr/>	<hr/>
Uncollected, Jan. 1, 1921 (per Auditor's Ledger)	\$	3,071.30

MOTH 1919.

Uncollected, Jan. 1, 1920 (per Auditor's Ledger)	\$	663.15
Collections, Jan. 1 to Dec. 31, 1920	\$	376.65
Abatements, Jan. 1 to Dec. 31, 1920	\$	1.20
Uncollected, Dec. 31, 1920 (per Auditor's Ledger)		285.30
	<hr/>	<hr/>
	\$	663.15
	\$	663.15

Proof.

Uncollected, Jan. 24, 1921 (per detailed list)	\$	239.50
Collections, Jan. 1 to 24, 1921	\$	45.80
	<hr/>	<hr/>
	\$	285.30

AUDITOR'S REPORT

TAXES 1920

Assessors' Warrant Commitment (per Auditor's Ledger)		\$3,516,281.55
Supplementary Commitment		8,080.48
Re-assessments after payment		265.20
Collections, June 8 to Dec. 31, 1920	\$2,722,888.89	
Abatements to December 31, 1920	19,023.76	
Uncollected, Dec. 31, 1920 (per Auditor's Ledger)	782,714.58	
		<hr/>
	\$3,524,627.23	\$3,524,627.23

Proof.

Uncollected, Feb. 7, 1921 (per detailed list)	\$581,341.04
Collections, Jan. 1 to Feb. 7, 1921	199,490.82
Abatements, Jan. 1 to Feb. 7, 1921	1,872.63
Undetected error	70.81
	<hr/>
	\$782,775.30
Less Overpayments (per list)	\$ 60.72
	<hr/>
Uncollected, Dec. 31, 1920 (per Auditor's Ledger)	\$782,714.58

STREET SPRINKLING 1920.

Commitment (per Auditor's Ledger)		\$ 25,405.45
Reassessment after payment		1.69
Collections, Oct. 2 to Dec 31, 1920	\$ 18,176.39	
Abatements, Oct. 2 to Dec. 31, 1920	115.20	
Uncollected, Dec. 31, 1920 (per Auditor's Ledger)	7,115.55	
	<hr/>	
	\$ 25,407.14	\$ 25,407.14

Proof.

Uncollected, Feb. 7, 1921 (per detailed list)	\$ 5,710.25
Collections, Jan. 1 to Feb. 7, 1921	1,401.17
Abatements, Jan. 1 to Feb. 7, 1921	4.13
	<hr/>
Uncollected, Dec. 31, 1920 (per Auditor's Ledger)	\$ 7,115.55

MOTH 1920.

Commitment (per Auditor's Ledger)		\$ 3,213.20
Collections, Oct. 2 to Dec. 31, 1920	\$ 2,374.50	
Uncollected, Dec. 31, 1920 (per Auditor's Ledger)	838.70	
	<hr/>	
	\$ 3,213.20	\$ 3,213.20

AUDITOR'S REPORT

161

Proof.

Uncollected, Feb. 7, 1921 (per detailed list)	\$ 687.95
Collections, Jan. 1 to Feb. 7, 1921	150.55
Abatements, Jan. to Feb. 7, 1921 .....	.20
	<hr/>
	\$ 838.70

SEWER ASSESSMENTS

Uncollected, Jan. 1, 1920 (per Auditor's Ledger)	\$ 1,498.11	
Commitments, Jan. 1 to Dec. 31, 1920	7,663.39	
Collections, Jan. 1 to Dec. 31, 1920	4,775.62	
Abatements, Jan. 1 to Dec. 31, 1920	237.28	
Uncollected, Dec. 31 1920 (per detailed list)	4,148.60	
	<hr/>	<hr/>
	\$ 9,161.50	\$ 9,161 50

SIDEWALK ASSESSMENTS

Uncollected, Jan. 1, 1920 (per Auditor's Ledger)	\$ 428.13	
Commitments, Jan. 1 to Dec. 31, 1920	4,205.32	
Collections, Jan. 1 to Dec. 31, 1920	\$ 2,985.99	
Uncollected, Dec. 31, 1920 (see detailed list)	1,647.46	
	<hr/>	<hr/>
	\$ 1,647.46	\$ 4,633.45

Assessor's Department:—The records of the Assessor's office, relating to the commitment and abatement of taxes, were examined, and as usual, found to be in excellent condition.

Abatements, were compared with the Collector's tax books, and Auditor's ledger, and found to have been correctly entered.

The following table shows a summary of the total abatements made by the Assessor's during the year 1920:

Levy	Polls	Personal	Real Estate	Totals
1917	\$10,940.00	\$2,963.40	\$ 433.00	\$14,336.40
1918	36.00	101.15	328.44	465.59
1919	2,712.00	1,492.40	2,323.10	6,527.50
1920	5,277.00	4,919.08	8,562.48	18,758.56
	<hr/>	<hr/>	<hr/>	<hr/>
	\$18,965.00	\$9,476.03	\$11,647.02	\$40,088.05

Licenses Commissioner's Department:—The financial records of this office were examined and verified. A large percentage of all licenses issued by the City are issued from this office: Fees for all licenses issued here are collected by the Clerk at this office, and later deposited with the City Treasurer, with the exception of fees for liquor licenses, which are paid directly to the Treasurer's office.

The fees for the issuance of liquor licenses during the year 1920 amounted to only \$16.00. From the same source the City collected during the year 1919, \$85,777.00, and during the year 1918, \$144,836.00.

The receipts for all other licenses issued from this office during the year 1920 amounted to \$8,634.50. There was a balance due the Treasurer at the end of the year 1919, for licenses issued during the year 1919, amounting to \$47.50, making the total amount paid the Treasurer by this office during the year 1920, \$8,682.00.

The following table shows a summary of the licenses issued during the year and the amount of fees collected therefor:

Amusements and Shows	64 issued	\$1,397.50
Auctioneers	29 "	58.00
Bicycle and Motorcycle	2 "	4.00
Coffee Houses	40 "	200.00
Express and Job Wagons	172 "	188.00
Hawkers and Peddlers No. 1	51 "	1,275.00
Hawkers and Peddlers No. 2	10 "	10.00
Innholders and Victuallers	123 "	613.00
Intelligence Offices	8 "	16.00
Junk Dealers and Collectors	126 "	394.00
Junk Dealers Badges	10 "	5.00
Musician	11 "	21.00
Pawn Brokers	8 "	208.00
Pool and Bowling	80 "	719.00
Photographs	7 "	7.00
Old Clothing	16 "	32.00
Sunday Ice Cream	514 "	2,578.00
Holiday Special	89 "	204.00
Agents Licenses	31 "	465.00
Junk Licenses	1 "	15.00
Used Car Dealers	13 "	195.00
Second Hand Auto Agent	2 "	30.00
		<hr/>
		\$8,634.50
Due from 1919		47.50
		<hr/>
Total payments to Treasurer		\$8,682.00

City Clerk's Department:—The financial records kept by the City Clerk's Office were examined, and the receipts checked, listed and verified.

The following table shows a summary of the total receipts for the year and the source of same:—

PERMITS:

Marriage	\$1,381.00
----------------	------------

LICENSES:

Gasoline	\$228.55
Firearms	30.00
	<hr/> \$ 258.55

SERVICES RENDERED:

Recording Mortgages	\$872.50
Assignment of Wages	11.95
Married Women's Certificate	6.10
Miscellaneous	893.93
	<hr/> \$1,784.48

Total Receipts and Payments to Treasurer	\$3,424.03
--	------------

Building Department:—The financial records of the Building Department were examined, checked and verified, by comparison with the books of the City Auditor and City Treasurer.

All bills sent out for collection were checked to the Auditor's accounts, and the uncollected bills at the end of the year 1920 were listed and proved.

The following tables show a record of the accounts receivable, and also the amount of cash collected and subsequently deposited with the Treasurer:

Uncollected, Jan. 1, 1920 (per Auditor's Ledger)	\$ 103.97
Commitments, Jan. 1 to Dec. 31, 1920	7,034.99
Collections, Jan. 1 to Dec. 31, 1920	\$7,070.71
Uncollected, Dec. 31, 1920 (per detailed list)	68.25
	<hr/> \$7,138.96
	<hr/> \$7,138.96

Cash Receipts

Elevator Operator's Licenses	\$ 40.00
Public Comfort Station	560.50
Weighing Machine	344.25
City Hall Telephone	1.42
Sale of Drum	4.20
	<hr/> \$950.37

The collections from Accounts Receivable were classified as follows:—

School House Rents	\$ 495.00
Court House Rents	2,950.00
Sale of Bartlett School Site	3,500.00
Miscellaneous Sales	125.71
	<hr/>
	\$7,070.71

Police Department:—The receipts of the Police Department were checked and proved. The following table shows the result of the examination:—

Uncollected, Jan. 1, 1920 (per Auditor's Ledger)	\$ 3.75
Commitments, Jan. 1 to Dec. 31, 1920	34.25
Collections, Jan. 1. to Dec. 31, 1920	\$ 34.25
Abatements Jan. 1 to Dec. 31, 1920	2.25
Uncollected, Dec. 31, 1920 (per detailed list)	1.50
	<hr/>
	\$ 38.00 \$ 38.00

Cash receipts of the department during the year amounted to \$73.21. This amount was duly deposited with the City Treasurer.

Fire Department:—The financial records of the Fire Department were examined, checked, added and verified.

The cash receipts of the department during the year amounted to \$621.37, classified as follows:—

Garage Permits	\$221.43
Re-imbursement by Chief for money loaned to Commissioner Brown in 1918	200.00
Fireworks Permits	102.99
Sale of Junk	40.00
	<hr/>
Total cash receipts made by the office	\$564.42
Collected by Treasurer on account of this department, for bills sent out	56.95
	<hr/>
Total receipts for the year 1920	\$621.37

I would suggest that the department obtain a different style of book in which to record the receipts of money collected for Garage Permits.

Wire Department:—The financial records of the Wire Department were checked, and the total receipts found to be \$447.24, all of which were collected by the City Treasurer. There were no uncollected bills at the end of the year.

Sealer of Weights and Measures:—The ledger and cash book kept by the Sealer were examined and verified, by comparison with the books of the Auditor and Treasurer.

The following table shows a proof of the accounts receivable and the amount of cash collected by the Sealer, and subsequently deposited with the Treasurer.

Uncollected, Jan. 1, 1920 (per Auditor's Ledger)	\$ 11.88	
Commitments, Jan. 1 to Dec. 31, 1920	243.01	
Collections, Jan. 1 to Dec. 31, 1920	\$239.43	
Abatements, Jan. 1 to Dec. 31, 1920 .....	.50	
Uncollected, Dec. 31, 1920 (per detailed list)	14.96	
	<hr/>	<hr/>
	\$254.89	\$254.89
Cash receipts of the Sealer, direct	\$1,016.26	
This money was duly deposited with the City Treasurer.		

Health Department:—The financial records of this department were examined, added and verified by comparison with the books of the Auditor and Treasurer.

Collections of cash are made by this office for the sale of Garbage and for the issuing of licenses for the collection of Garbage and other miscellaneous purposes.

All collections made by the department are deposited with the Treasurer daily, and signed acknowledgment of same are on file at the departmental office. The total amount of these receipts for the year were as follows:—

Sale of Garbage	\$3,997.71
Garbage Licenses	490.00
Denatured Alcohol Licenses	16.00
Massage License	2.00
Genito-Urinary Clinic Fees	704.20
Board at Tuberculosis Hospital	60.00
Insurance for damage to Automobile	12.00

Total cash receipts collected by Dept.	\$5,281.91
---	------------

Uncollected accounts receivable on December 31, 1920, were listed and the collections of the department through the Treasurer's office were proved as follows:—

Uncollected Jan. 1, 1920 (per Auditor's Ledger)	\$1,254.82	
Commitments, Jan. 1 to Dec. 31, 1920	3,813.07	
Collections, Jan. 1 to Dec. 31, 1920	\$2,095.64	
Abatements, Jan. 1 to Dec. 31, 1920	734.32	
Uncollected, Dec. 31, 1920 (per detailed list)	2,237.93	
	<hr/>	<hr/>
	\$5,067.89	\$5,067.89

Milk Inspector:—The cash book kept by the Inspector was examined and checked as follows:—

Milk Licenses Issued	669	\$330.50
Oleo Licenses Issued	68	34.00
Other Licenses Issued	10	5.00

Total Receipts of Department		\$373.50
------------------------------------	--	----------

Street Department:—The financial records of the Street Department were examined and verified by comparison with the books of the Auditor and Treasurer.

The outstanding accounts receivable on December 31, 1920, were listed and the total receipts of the department for the year were proved thereby.

The following table shows a summary of the bills sent out and the collections on account of same, as proved:—

Uncollected, Jan. 1, 1920 (per Auditor's Ledger)		\$ 702.82
Uncollected Granolithic Sidewalk Bills, Jan. 1, 1920		277.52
Commitments, Jan. 1 to Dec. 31, 1920		2,506.83
Collections, Jan. 1 to Dec. 31, 1920	\$2,599.26	
Abatements, Jan. 1 to Dec. 31, 1920	13.52	
Uncollected, Dec. 31, 1920 (per detailed list)	874.39	
		<hr/>
		\$3,487.17 \$3,487.17

The department makes no collections directly, but sends out bills for all amounts due, and these are collected by the Treasurer's office. The total collections of the year, as proved, are classified as follows:—

Sewer Connections	\$ 241.18
Street Maintenance	1,504.24
Sidewalk Maintenance	520.21
Street Sprinkling	333.63

Total Receipts	\$2,599.26
----------------------	------------

Charity Department, Outdoor Relief:—The financial records of this department were examined, checked, added and verified by comparison with the books of the Auditor and Treasurer.

The outstanding accounts receivable at the end of the year were listed, and a proof obtained of the total receipts of the department, collected by the Treasurer, during the year 1920, as follows:—

Uncollected, Jan. 1, 1920 (per Auditor's Ledger)	\$2,959.75
Commitments, Jan. 1 to Dec. 31, 1920	9,083.47
Collections, Jan. 1 to Dec. 31, 1920	\$8,702.34
Abatements, Jan. 1 to Dec. 31, 1920	186.66
Uncollected, Dec. 31, 1920 (per detailed list)	3,154.22

	<hr/>	<hr/>
	\$12,043.22	\$12,043.22

Charity Department, Hospital:—The Accounts Receivable of this department were proved, as follows:—

Uncollected, Jan. 1, 1920 (per Auditor's Ledger)	\$1,115.75	
Commitments, Jan. 1 to Dec. 31, 1920		4,076.83
Collections, Jan. 1 to Dec. 31, 1920	\$4,479.44	
Abatements, Jan. 1 to Dec. 31, 1920	353.75	
Uncollected, Dec. 31, 1920 (per detailed list)	359.39	
	<hr/>	<hr/>
	\$5,192.58	\$5,192.58

School Department:—The financial records of the School Department were examined, checked, added and verified by comparison with the books of the Auditor and Treasurer.

The uncollected accounts receivable at the end of the year were listed, and the total collections of the Treasurer during the year, on account of the School Department, proved thereby.

This department has quite a number of old bills outstanding which should either be collected or abated, if uncollectable, at once. There is no necessity of carrying uncollectable accounts as assets on the books of the City.

The following table shows a summary of the Accounts Receivable, and a proof of the Treasurer's collections during the year, on account of the School Department:—

Uncollected, Jan. 1, 1920 (per Auditor's Ledger)	\$ 2,590.98	
Commitments, Jan. 1 to Dec. 31, 1920		15,771.14
Collections, Jan. 1 to Dec. 31, 1920	\$11,341.71	
Abatements, Jan. 1 to Dec. 31, 1920	686.75	
Uncollected, Dec. 31, 1920 (per detailed list)	6,333.66	
	<hr/>	<hr/>
	\$18,362.12	\$18,362.12

Vocational School:—The financial records of this department were examined, checked, added and verified by comparison with the books of the Auditor and Treasurer.

The following table shows a proof of the Accounts Receivable and the collections on account of same, together with the outstanding accounts at the end of the year:—

Uncollected, Jan. 1, 1920 (per Auditor's Ledger)	\$15,462.21	
Commitments, Jan. 1 to Dec. 31, 1920		28,617.69
Collections, Jan. 1 to Dec. 31, 1920	\$18,417.01	
Abatements, Jan. 1 to Dec. 31, 1920	116.76	
Uncollected, Dec. 31 1920 (per detailed list)	25,546.13	
	<hr/>	<hr/>
	\$44,079.90	\$44,079.90

Library Department:—The financial records of this department were examined, checked, added and verified by comparison with the books of the Auditor and Treasurer.

The receipts for fines and sales were listed and proved, as follows:—

Collections due Treasurer, Jan. 1, 1920	\$ 347.96	
Receipts during 1920 for Fines and Sales		1,090.56
Payments made to Treasurer during 1920	\$ 817.05	
Collections due Treasurer, Dec. 31, 1920	621.47	
	<hr/>	<hr/>
	\$1,438.52	\$1,438.52

Park Department:—The financial records of this department were examined and the receipts proved.

The receipts were all collected by the department, and subsequently deposited with the Treasurer.

The following table shows a summary of the receipts during the year, and the source of same:—

Vendors' Permits, South Common	\$ 50.00
Rental of Fair Grounds	700.00
Rental of Lots at South Common, July 4	2,307.00
Weighing Machine	9.31
Damage to Tree	5.00
Bath House Receipts	1,658.15
	<hr/>
Total Receipts	\$4,729.46

Water Department:—The financial records of the Water Department were examined, checked, added and verified by comparison with the books of the Auditor and Treasurer.

The income of the department, for current expenses, including the maturing water debt, and the interest on the total water debt, is derived entirely from the collections made for Water Accounts Receivable.

These Accounts Receivable were verified by listing the accounts due at the end of the year 1920, and effecting a reconciliation between the bills sent out during the year and the collections as reported by the Treasurer's office during the same period.

The financial records of the Water Department are, as usual, in good condition, and the accounts receivable were readily proved, as follows:—

Uncollected, Jan. 1, 1920 (per Auditor's Ledger)	\$ 3,730.21	
Commitments, Jan. 1 to Dec. 31, 1920		394,451.29
Collections, Jan. 1 to Dec. 31, 1920	371,918.38	
Discounts, Jan. 1 to Dec. 31, 1920	17,121.57	
Abatements, Jan. 1 to Dec. 31, 1920	2,612.34	
Uncollected, Dec. 31, 1920 (per detailed list)	6,529.21	
	<hr/>	<hr/>
	\$398,181.50	\$398,181.50

The total collections for the year, amounting to \$371,918.38, as proved above, were classified from the following sources:—

Water Rates, Annual	\$ 24,661.24
Water Rates, Metered	324,810.19
Maintenance	15,457.35
Construction	6,989.60
Total Receipts	\$371,918.38

At the beginning of the fiscal year of 1920 the Water Department had a deficit, or in other words, owed the City of Lowell, \$56,942.51.

At the end of the year 1920, this deficit had increased to \$100,952.32, showing that the expenses of the department during the year were in excess of its income by \$44,009.81.

The following table summarizes the total income and expenses of the department during the fiscal year of 1920:—

Income

Total Collections from Water Rates	\$371,918.38
Accrued Interest on Loan	23.70
Transfers from School Construction	250.01

Expenses

Labor Pay Rolls	\$176,900.52
Maturing Debt	63,000.00
Interest on Debt	57,173.75
Bills approved and paid, as follows:—	
Fuel	69,540.11
Pipe and Fittings	16,112.25
Meters	5,770.08
Stable Expense	7,577.13
Repairs and Equipment	10,285.42
Pumping Station Supplies	9,593.01
Refunds	249.63
Total Income	\$372,192.09
Total Expense	\$416,201.90
1920 Deficit	44,009.81
	<hr/>
	\$416,201.90 \$416,201.90

Public Scales:—The receipts of the City Scales were proved by examining the books of the department, in comparison with the books of the Auditor and Treasurer. The total receipts were as follows:—\$93.25.

Cemetery Department:—The financial records of the Cemetery Department were examined, checked, added and verified by comparison with the books of the Auditor and Treasurer.

This department is self-supporting. Its income is derived from the Sale of Lots and Graves, Care of Lots, Opening Graves, and other miscellaneous services, together with the income earned by the Cemetery Perpetual Care Trust Funds, of which the City Treasurer is Custodian.

The Accounts Receivable of the department were proved, as follows :—

Uncollected, Jan. 1, 1920 (per Auditor's Ledger) ..	\$ 3,997.08	
Commitments, Jan. 1 to Dec. 31, 1920		13,713.60
Collections Jan. 1 to Dec. 31, 1920	\$12,762.47	
Abatements, Jan. 1 to Dec. 31, 1920	77.00	
Uncollected, Dec. 31, 1920 (per detailed list)	4,871.21	
	<hr/>	<hr/>
	\$17,710.68	\$17,710.68

In addition to the collections made by the Treasurer's office on account of Accounts Receivable, the department makes cash collections, and deposits the money with the Treasurer, at regular intervals.

During the year 1920, the total amount collected at the Cemetery office was \$5,896.55, making the total receipts of the department for sales and services, \$18,659.02, classified as follows :—

Sale of Lots and Graves	\$ 4,771.50
Care of Lots and Graves	7,692.37
Opening Graves	5,655.50
Recording and Miscellaneous	539.65
	<hr/>
Total Receipts	\$18,659.02

Interest and Indebtedness:—Receipts on account of Interest were verified and summarized as follows :—

On Deferred Taxes	\$30,054.23
On Bank Deposits	12,585.68
On John Davis, Library Trust Fund	3,967.01
On Cemetery Perpetual Care Funds	17,850.00
On Stackpole, Cemetery Fund	45.50
On Jno. Tyler, Worthy Poor Fund	488.81
On Auditorium Fund	71.63
	<hr/>
Total Receipts from Interest	\$65,062.86

The following table summarizes the interest receipts from Interest on deposits:—

Lowell Trust Co.	\$ 1,207.89
Union National Bank	1,595.41
Old Lowell National Bank	1,051.68
Middlesex Trust Co.	1,960.54
Appleton National Bank	1,557.10
Wamesit National Bank	1,175.24
First National Bank of Boston	1,531.92
High School Fund	2,505.90
<hr/>	
Total Interest on Deposits	\$12,585.68

The records of Loans Authorized and the receipts on account of loans issued during the year were examined and proved.

The receipts agreed with the authorizations of the Municipal Council, and were summarized as follows:—

Bonds issued	\$1,487,000.00
Temporary Loans issued	3,000,000.00
Premium on above Loans	11,558.80
Accrued interest on above loans	4,462.91
<hr/>	
Total receipts from Intebtedness	\$4,503,021.71

Payments on account of Interest and Debt were proved by the Auditor's debt record of amounts falling due during the year, and by an examination of the Treasurer's subsidiary cash book, which is kept especially for this purpose.

This proved to agree with the Auditor's ledger account of same, and also with the actual amount owed by the City.

The interest requirements and debt maturing during the fiscal year of 1920 were as follows:—

Interest :

On Temporary Revenue Loans	\$ 9,200.00	
On General City Debt issued previous to 1920	142,229.00	
On General City Debt issued previous to 1920	17,412.50	
On Water Debt issued previous to 1920	56,817.50	
On Water Debt issued in 1920	356.25	
	<hr/>	\$226,015.25

Indebtedness :

Temporary Loans issued in 1919	\$ 800,000.00	
Temporary Loans issued in 1920	1,800,000.00	
General City Debt	794,150.00	
Water Loans	1,063,000.00	
	<hr/>	\$4,457,150.00
Total Interest and Debt requirements		\$4,683,165.25

The following table shows the Treasurer's account of unpaid debt and interest on January 1st, 1920, together with the interest and debt requirements for the year; also the total payments made by the Treasurer, during the year, and the balance in the bank to the credit of this account on December 31st, 1920.

This balance was proved to be correct by an examination of the bank statement of even date.

Unpaid debt and interest, Jan. 1, 1920 (per

Auditor's Ledger)	\$ 14,707.50	
Interest and Debt requirements (as above)	4,683,165.25	
Total payments during year, as verified	\$4,671,515.25	
Unpaid Debt and Interest, Dec. 31, 1920	26,357.50	
	<hr/>	<hr/>
	\$4,697,872.75	\$4,697,872.75

In addition to the Interest payments recorded above, there were discounts on temporary loans issued in 1920, amounting to \$84,412.33, which were not accounted for on the Debt and Interest Cash Book.

Sinking Funds:—At the beginning of the year 1920 the City of Lowell had loans outstanding amounting to \$1,800,000.00, for the payment of which Sinking Funds had been provided.

Of these loans, two became due, and were paid during the year. The City Hall Building Loan, amounting to \$450,000.00 became due and was paid on October 1st. The Water Construction Loan, amounting to \$1,000,000.00 became due and was paid on November 1st.

The City has, therefore, only two loans payable by this method, at the present time.

These are the High School Loan, amounting to \$150,000.00, which becomes due and payable on April 1st, 1921, and the new School House Loan which becomes due and payable on July 1st, 1926.

The total amount of cash, together with the par value of the securities in these funds on January 1st, 1921, was \$351,411.58.

The securities of the two funds, comprising the total amount owned by the City, was personally examined and checked to a prepared list, and reconciled back to January 1st, 1921.

The securities were found to be in excellent condition, and readily verified. All coupons not matured were found to be intact, and the securities checked agreed with the list furnished, and also with the books of the City Treasurer, who is also Treasurer of all Sinking Funds.

The income earned by each fund was figured, and the cash transactions during the year were examined and proved.

The following tables show the receipts and payments during the year, together with the cash balances at the beginning and end of the year, as verified by statements received from the various banks of deposit:

NEW SCHOOL HOUSES LOAN SINKING FUND

	Cash	Securities	Total
On hand at beginning of year	\$ 178.10	\$150,500.00	\$150,678.10
On hand at end of year	2,077.46	171,000.00	173,077.46

Receipts		Payments	
Annual Appropriation ..	\$ 3,000.00	Securities purchased	\$237,000.00
Income on Securities	9,325.81	Discount on securities	
Interest on Deposits	114.00	sold	4,463.35
Securities sold or ma-		Accrued Interest on	
tured	216,500.00	securities purchased ..	877.10
Discount on Securities			
purchased	15,300.00		
Total Receipts	\$244,239.81	Total Payments	\$242,340.45
Cash, Jan. 1, 1920	178.10	Cash, Dec. 31, 1920	2,077.46
	\$244,417.91		\$244,417.91

NEW SCHOOL HOUSES LOAN SINKING FUND

	Cash	Securities	Total
On hand at beginning of year	\$ 456.54	\$139,500.00	\$139,956.54
On hand at end of year	9,334.12	169,000.00	178,334.12

Receipts		Payments	
Annual Appropriation ..	\$ 4,000.00	Securities purchased	
Income on Securities	8,941.36	(par)	\$278,000.00
Interest on Deposits	145.70	Accrued interest on	
Securities sold or ma-		above	1,069.67
tured	248,500.00	Discount on securities	
Discount on Securities		sold	13,336.10
purchased	39,696.29		
Total receipts	\$301,283.35	Total Payments	\$292,405.77
Cash, Jan. 1, 1920	456.54	Cash, Dec. 31, 1920	9,334.12
	<u>\$301,739.89</u>		<u>\$301,739.89</u>

CITY HALL LOAN SINKING FUND

	Cash	Securities	Total
On hand at beginning of year	\$307.65	\$442,500.00	\$442,807.65
On hand at end of year	none	none	none

Receipts		Payments	
Annual Appropriation ..	\$ 7,500.00	Securities purchased	
Special Appropriation ..	4,241.73	(par)	\$152,500.00
Income on Securities	20,642.60	Accrued interest on	
Interest on Deposits	211.95	above	1,305.58
Discount on Securities		Discount on Securities	
purchased	491.75	sold	24,590.10
Securities sold	595,000.00	Debt matured and paid	450,000.00
Total Receipts	\$628,088.03		
Cash, Jan. 1, 1920	307.65	Total Payments	\$628,395.68
	\$628,395.68		\$628,395.68

WATER WORKS SINKING FUND

	Cash	Securities	Total
On hand at beginning of year	\$410.54	\$967,950.00	\$968,360.54
On hand at end of year	none	none	none

Annual Appropriation ..	\$ 16,000.00	Securities purchased	\$643,500.00
Special Appropriation ..	40,258.27	Accrued interest on	
Income on Securities	48,357.64	above	5,592.79
Securities sold (par		Discount or Securities	
value)	1,611,450.00	sold	84,953.51
Discount on securities		Debt matured and paid	1,000,000.00
purchased	17,307.80		
Interest on deposits	262.05		
Total Receipts	\$1,733,635.76		
Cash, Jan. 1, 1920	410.54		
	<hr/> \$1,734,046.30		<hr/> \$1,734,046.30

Trust Funds:—The securities belonging to the several trust funds owned by the City of Lowell were personally examined and listed, and the cash transactions during the year were checked and proved.

The City Treasurer is Custodian of all Trust Funds, both cash and securities, and the records are in excellent condition and easily checked and proved.

The following tables show the standing and value of funds, for which the City has cash and securities, as examined and verified.

JOHN DAVIS LIBRARY TRUST FUND

	Cash	Securities	Total
On hand at beginning of year	\$3,256.17	\$100,712.19	\$103,968.36
On hand at end of year .....	.97	106,221.82	106,222.79

Receipts		Payments	
Income on Securities	\$ 4,643.00	Securities purchased	
Interest on deposits	52.10	(par)	\$ 6,000.00
National Bank Tax	92.96	Accrued Interest on	
Interest on Mortgage ..	682.00	above	114.75
Mortgage paid	500.00	Commission on above	7.50
Discount on Securities		Paid to City of Lowell	
Purchased	864.00	for Library Expenses	3,967.01
Total Receipts	\$ 6,834.06	Total Payments	\$ 10,089.26
Cash, Jan. 1, 1920	3,256.17	Cash, Dec. 31, 1920 .....	.97
	<u>\$ 10,090.23</u>		<u>\$ 10,090.23</u>

HAPGOOD WRIGHT CENTENNIAL FUND

On hand January 1, 1920	\$12,655.03
Income earned during year	600.64
On hand December 31, 1920	<u>\$13,255.67</u>

JONATHAN TYLER WORTHY POOR FUND

On hand at beginning of year	\$10,000.00
On hand at end of year	10,000.00
Income earned during year	\$488.81
Income withdrawn during year	488.81
Securities examined as follows:—	
Central Five Cent Savings Bank, Book 67231	\$2,000.00
Merrimack River Savings Bank, Book 18705	2,000.00
Lowell Five Cent Savings Bank, Book 139598	2,000.00
City Institution for Savings, Book 124026	2,000.00
Mechanics Savings Bank, Book 40383	2,000.00
Total amount of fund	\$10,000.00

CEMETERY PERPETUAL CARE FUND

	Principal	Income	Total
On hand at beginning of year	\$126,740.00	\$21,634.98	\$148,374.98
Receipts during year	14,325.00	6,869.50	21,194.50
	\$141,065.00	\$28,504.48	\$169,569.48
Withdrawn for Cemetery Expenses		17,850.00	17,850.00
On hand at end of year	\$141,065.00	\$10,654.48	\$151,719.48
Securities examined, as follows:—			
Old Lowell National Bank, Book 2925		\$	3,773.24
Merrimack River Savings Bank, Book 8765			18,505.34
City Inst. for Savings, Book 74283			20,964.12
Central Savings Bank, Book 26100			18,035.19
Lowell Five Cent Savings Bank, Book 47514			18,476.71
Mechanics Savings Bank, Book 24823			17,423.80
Lowell Inst. for Savings, Book 79266			17,978.13
Middlesex Trust Co., Book 1755			18,679.40
Washington Savings Bank, Book 1216			17,883.55
Total amount of Securities, Dec. 31, 1920			\$151,719.48

JOSEPH H. STACKPOLE CEMETERY FUND

This fund is invested in the Lowell Five Cent Savings Bank, Book 131530, and the total amount on hand at the beginning and end of the year was \$1,000.00. The income earned was \$45.50, which was all withdrawn from the bank and expended as provided for in the terms for the deed of gift.

Conclusion:—The audit of the 1920 accounts has been satisfactory from a clerical point of view in most departments.

The City has a modern system of accounting, and the valuable information obtained therefrom is of great service to the City in promoting efficiency and economy.

However, in order to obtain the full advantage of the system, great care must be taken by all departments to keep the financial records correct and up to date.

All departments should make sure that all departmental bills sent out by them are collected promptly.

The revenue deficit of the Water Department should be reduced or entirely closed out without delay, either by a reduction of expenses, or if this is impossible, by an increase of income.

The appended balance sheet, under date of December 31st, 1920, consists of a statement of the Assets and Liabilities of the City on that day, as disclosed by the audit.

I wish to express my appreciation for the courtesies received during the progress of the audit.

Respectfully submitted,

EVERETT E. TARBOX.

CITY OF LOWELL

Balance Sheet January 1, 1921

REVENUE		Liability Accounts	
Asset Accounts			
Cash, in Banks and Office		Anticipation of Revenue	\$1,200,000.00
Accounts Receivable:		Premiums (Reserved for payment of debt)	17,386.09
Taxes 1915	\$ 1,069.64	Appropriation Balances:	
Taxes 1916	8,687.64	Motor Driven Apparatus	\$ 9,545.00
Taxes 1917	6.00	Land for Engine House	13,376.81
Taxes 1918	15,457.54	Cemetery	21,450.50
Taxes 1919	219,885.76	Charter Commission	823.61
Taxes 1920	782,714.58		
	<hr/>		<hr/>
	\$1,027,821.16		\$ 45,195.92
Street Sprinkling 1915	\$ 14.55		
Street Sprinkling 1919	3,071.30		
Street Sprinkling 1920	7,115.55		
	<hr/>		
	\$ 10,201.40		
Moth Assessments 1918	\$ 1.60	Less Appropriation	
Moth Assessments 1919	285.30	Overdrafts:	
Moth Assessments 1920	838.70	Police	\$ 22,473.72
	<hr/>	Fire	8,016.22
Sewer Assessments		Health Office	1,815.37
Sidewalks Assessments		Health Yard	7,187.03
Tax Titles		Inspector of Animals	90.00

REVENUE—Continued

Asset Accounts		Liability Accounts	
Departmental Bills:		Inspector of Milk	
Buildings	\$ 68.25	Comfort Station	\$ 106.44
Police	1.50	Charity O. D. R.	338.06
Fire .....	.45		1,280.19
Sealer	14.96		
Health	2,237.93		\$ 41,307.03
Highways	874.39		
Charity, Out Door Relief	3,154.22	Overlays:	\$ 3,888.89
Charity, Hospital	359.39	(Reserved for Abatement of Taxes)	
State Aid	8,258.50	1916	\$ 1,732.31
Military Aid	1,720.00	1917	295.39
Soldiers Burials	232.00	1918	23,678.92
Schools, General	6,333.66	1919	73,163.35
Schools, Vocational	25,546.13	1920	94,979.39
			\$ 193,849.36
Revenue Accounts:		Revenue Accounts:	
Water Rates	\$ 48,801.38	Reserved when collected for,	
Cemetery Bills	6,529.21	Water Department	\$ 6,529.21
Due from Water Department	4,871.21	Cemetery Department	4,871.21
	100,952.32		
		Surplus, 1920 and prior	\$ 11,400.42
			85,914.39
			\$ 1,512,439.15
			\$ 1,512,439.15

CITY OF LOWELL

Balance Sheet January 1, 1921

NON-REVENUE

Asset Accounts

Cash, in Banks and Office
 Loans Authorized

\$ 505,740.80
 1,510,000.00

Liability Accounts

Appropriation Balances, from Loans :
 Health and Sanitation :

Sewer Construction \$ 361.19
 Isolation Hospital Equipment 537.79
 Public Bath and Comfort
 Station 125.60

\$ 1,024.58

Highways and Bridges :

Paving \$ 2,105.82
 Macadamizing 32.91
 New Sidewalks 7.42
 Bridge Construction 15,725.18
 First Street Extension 12,004.05
 Widening Locke Street 6,185.25

\$ 36,060.63

Education :

High School Construction \$1,322,039.86
 School Construction 22,319.40
 School Houses, 1920 1,305.83

\$1,345,665.09

Water :

Extension of Water Mains ... \$ 16,782.31
 Acquiring Land and Protect-
 ing Water Supply 3,463.51

\$ 20,245.82

NON-REVENUE—Continued		
Asset Accounts	Liability Accounts	
	Unclassified:	
	Municipal Purposes	\$ 1,625.02
	Memorial Auditorium	611,119.66
		<u>\$ 612,744.68</u>
		<u>\$2,015,740.80</u>
	Indebtedness	
	Funded Debt (With Sinkink Funds):	
Sinking Funds (Cash and Securities):	High School Loan, due April	\$ 150,000.00
High School Loan Fund	1, 1921	
School House Loan Fund	School House Loan, due July	200,000.00
	1, 1926	<u>\$ 350,000.00</u>
Net Bonded Debt	Serial Loans:	
	4% Loans	\$1,285,135.00
	4¼% Loans	79,800.00
	4½% Loans	1,279,550.00
	4¾% Loans	405,000.00
	5% Loans	850,000.00
	5½% Loans	244,000.00
	6% Loans	28,000.00
	Trust Funds, used by City	26,200.00
		<u>\$4,197,685.00</u>
		<u>\$4,547,685.00</u>

NON-REVENUE—Continued

Asset Accounts		Liability Accounts	
Trust Funds:		Trust	
Cash and Securities	\$ 282,197.94	Jonathan Tyler, Worthy Poor Fund	\$ 10,000.00
Used by City	26,200.00	John Davis, Library Fund	106,222.79
		Hapgood Wright, Centennial Fund	13,255.67
		Edson Cemetery Perpetual Care Fund	151,719.48
		J. H. Stackpole, Cemetery Fund	1,000.00
			\$ 282,197.94
		Used by City:	
		Carney High School Medal Fund	200.00
		Nesmith Worthy Poor Fund	25,000.00
		Nesmith High Street Church Fund	1,000.00
			\$ 26,200.00
	\$ 308,397.94		\$ 308,397.94

INDEX

	Page
Accountant's Report	149-186
Auditor's Report by Departments	57-111
Auditor's Balance Sheet	10
Auditor's Debt Statement	11-12-13
Cemeteries—Trust Funds	114-122 to 126
City Debt	128
City Hall and Memorial Building	117
Debt maturing 1921	144
Expenditures—New High School	148
Financial Statement	47-57
High Street Church Clock	145
Indebtedness	11-12-13
Loans	13
Property Exempt from Taxation	145
Property Owned by City—Valuation	7-8-9-128-142
Receipts and Payments—Classified	16-46
Sinking Funds	114-126
Tax Rates	143
Total Valuation	128
Treasurer's Report	121-126
Trust Funds, etc.	122-126-145

By Accounts

Acquiring Land, Constructing New High School	107
Acquiring Land and Constructing Schools	107
Appropriation for Liquidation and Payment Certain Accounts and Bills Due from City of Lowell to Various Firms and Persons for and on Account of Several of its Departments During the Fiscal Year 1919	100
Assessors	60
Assessors' Tax Books	60
Auditor	59
Auditing City Books	99
Band Concerts	89
Bridge Construction	105
Bay State Street Railroad	98
Cemeteries	94
Charity Department	82-84
Charity Department—Dependent Mothers	84
City Clerk	62
City Debt	95

	Page
City Hall	64
City Hall Boilers	65
Claims	99
Comfort Station	78
Commissioners	58
Construction and Extension First Street	106
Corporation Tax	98
Elections and Registration	63
Engineering	63
Fire	69
Fish and Game Wardens	72
Fourth of July	91
General Expense	100
Health	75
Highways	80
Inspection of Buildings	70
" " Wires	71
" " Milk and Vinegar	77
" " Animals	77
Inspection School Children	76
Insurance	65
Interest	95
Isolation Hospital	79-102
Labor Day	91
Law	61
Library	92
License Commission	61
Lowell Charter Commission	101
Lowell Memorial Auditorium	111-147
Macadamizing	104
Mayor	58
Memorial Day	90
Messenger	62
Moths	72
Municipal Purposes	111
New Sidewalks	105
Parks	89
Paving	104
Purchasing Agent	64
Police	68
Pound Keeper	72
Public Baths and Comfort Station	103
Registrar of Labor	65
Revision of Ordinance	99
Rifle Range	70

	Page
Schools	87
Sealer	71
Sewer Construction	102
Sewer Maintenance	78
Sinking Funds	87
Smith Hughes Fund	88
Smoke	76
Soldiers' Benefits	85
Soldiers' Exemption	85
Soldiers' Graves	85
Streets	80
Street Lighting	81
Street Watering	81
State Portion of Poll Tax	97
Taxes—County	97
Taxes—Grade Crossings	96
“ Hales Brook Improvement	97
“ Highways	96
“ Liquor Licenses	96
“ Levy	7-8
“ National Bank	96
“ Special Tax Army and Navy	97
“ State	97
Textile School	88
Treasurer	59
Veteran Firemen's Association	91
Waterways	73
Water Works	93
“ “ Purifying and Constructing Water System	110
“ “ Purchase Land	110
Weigher	73
Workmen's Compensation Act	99
Repairing and Constructing Laura Lee School	73
Motor Driven Apparatus	74
Purchasing Land in Highlands and Constructing Fire House	74
Sight Saving Classes	88
Widening Locke Street	106
Acquiring Land and Constructing School Houses Year 1920	108
Acquiring Land for Public Parks on the Southerly Side of River- side Street	109



Ninth Annual Report
OF THE
COMMISSIONER
OF
WATER WORKS
OF THE
CITY OF LOWELL, MASS.

To the Municipal Council, for the year ending
Dec. 31, 1920, and being the Forty-Eighth
Annual Report of the Water
Works Department.



Including Reports of the Superintendent,
City Engineer and Registrar

1920

F. A. M. TOBIN'S PRINTERY

The annual report of the operation of the Water Works
Department of the City of Lowell for 1920 by the

Superintendent, ROBERT GARDNER,

Engineer, STEPHEN KEARNEY,

Registrar, J. W. CRAWFORD,

to John F. Salmon, Commissioner Water Works and Fire
Protection, Lowell, Mass.

The following tables will show the financial operation of
the Water Works Department for the year 1920:

J. W. CRAWFORD,

Registrar.

Jan. 1, 1921.

LOWELL WATER WORKS
CONSOLIDATED STATEMENT, 1920

Balance, Jan. 1, 1920 W. Wks.		Operation and repairs	\$269,143.91
App. Dept. equipment, loans	\$52,201.46	Interest	57,173.75
Dept. equipment, loan	15,000.00	Payments on loans	63,000.00
Bal. for land loan	3,783.76	Payments for W. W. Construction Acct.	26,634.61
Received from Water Meter rates	327,664.25	Payments for Dept. Equipment Acct.	50,419.15
Received from Water fixture rates	11,460.63	Payments for Land Acct.	320.25
Received from transfers	9,791.64	Payments for Refunds	249.63
Received from labor and material	23,275.57	Bal. Dec. 31, 1919 W. Wk. Acct.:	
O D Dec. 31st, W. Wks. Acct.	44,009.81	Dept. Equipment Appro.	\$16,782.31
		Purchase land	3,463.51
			<hr/>
			\$487,187.12

PRINCIPAL AND INTEREST, LOWELL WATER WORKS, 1920

	Amount Jan. 1, 1920	Annual Payment	Interest 1920	Amount Jan. 1, 1921	Amount Original loan	Rate Per Cent	Payable
Bonds							
1890	\$1,000,000.00		\$40,000.00			.....
1910	6,000.00	\$6,000.00	240.00		\$60,000.00	4	Dec.
A. C. Pump							
1911	20,000.00	10,000.00	800.00	\$10,000.00	100,000.00	4	Aug.
P. S. Reservoir and Mains							
1912	48,750.00	3,750.00	1,950.00	45,000.00	75,000.00	4	Sept.
P. S. Reservoir and Mains							
1913	52,500.00	3,750.00	2,362.50	48,750.00	75,000.00	4½	Aug.
1914	12,500.00	500.00	500.00	12,000.00	15,000.00	4	Aug.
1915	177,000.00	12,000.00	6,840.00	165,000.00	225,000.00	4	Apr.
Purification Plant							
1916	22,000.00	11,000.00	660.00	11,000.00	55,000.00	4	May
Ext. Mains Dept. Equipment							
1919	30,000.00	6,000.00	1,215.00	24,000.00	30,000.00	4½	Mar.
Ext. Mains Dept. Equipment							
1919	50,000.00	10,000.00	2,250.00	40,000.00	50,000.00	4½	Sept.
Engine							
1920	15,000.00		356.25	15,000.00	15,000.00	4¾	
Engine Foundation							
Total	\$1,433,750.00	\$63,000.00	\$57,173.75	\$370,750.00			

LOWELL WATER WORKS

<i>Charges and Receipts, 1920</i>				<i>Expended, 1920</i>	
	Stock	Labor	Water	Administration Expense:	
	Main't	Const.		Payroll	
Jan.-Mar.	\$1,768.90	\$1,872.86	\$58,720.24	.....	\$25,669.28
Apr.-June	2,555.65	1,752.70	81,384.24	.....	1,637.44
May			15,833.89	General Expense:	
July-Sept.	5,056.46	1,642.77	136,616.59	Payroll	\$82,629.44
Oct.-Dec.	3,157.07	3,190.93	80,918.99	Supplies	17,871.72
				Pumping Station Expense:	
Total				Payroll	\$45,131.87
charges	\$12,518.08	\$8,459.26	\$373,473.95	Supplies	79,133.12
Add				Meter Expense:	
Tr. Jan. 1-20	\$1,727.23	\$ 297.29	\$1,705.69	Payroll	\$11,300.96
Total	\$14,245.31	\$8,756.55	\$375,179.64	Supplies	5,770.08
Less				Construction Expense:	
Tr. Jan. 1-21	811.99	1,556.27	4,160.95	Payroll	\$12,168.97
				Supplies	14,465.64
Total	\$13,443.32	\$7,200.28	\$371,018.69		
Less abatements			\$2,612.34	Interest payments	\$295,778.52
Discounts			17,121.57	Principle payments	57,173.75
					63,000.00
Add Transfers from Depts.				Refunds	\$415,952.27
Total Receipts					249.63
				Total Expended	\$416,201.90

FINANCIAL STATEMENT
LOWELL WATER WORKS, 1920

Maintenance

Labor

Office and officials	\$25,669.28	
Pumping stations	45,131.87	
Filter	15,380.69	
General maintenance	67,248.75	
Meters	11,300.96	
		<hr/>
		\$164,731.55

Material:

Water works supplies	\$16,847.37	
Pumping station supplies	9,593.01	
Coal	69,540.11	
Stable	7,577.13	
Filter	854.74	
		<hr/>
		\$104,412.36
		<hr/>
		\$269,143.91

Construction

Labor	\$12,168.97	
Material	14,465.64	
		<hr/>
		\$26,634.61

FINANCIAL STATEMENT
 LOWELL WATER WORKS, 1920
Appropriation for Department Equipment

Bal. Jan. 1, 1920	\$52,201.46	
Loan	15,000.00	
		<hr/>
		\$67,201.46
Expended		\$50,419.15
		<hr/>
Balance to 1921		\$16,782.31

Appropriation for Purchase of Land

Balance Jan. 1, 1920	\$3,783.76	
Expended	320.25	
		<hr/>
	Balance to 1921	\$3,463.51

Superintendent's Report

Lowell, Mass., January 1, 1921.

Mr. John F. Salmon,

Commissioner of Water Works and Fire Protection of the
City of Lowell, Massachusetts.

Dear Sir:

Herewith are submitted tables showing operations of the
Department for the year ending December 31, 1920.

NEW HYDRANTS, 1920

Bunker Hill St.	Boston Post Hydrant
Groton St.	Boston Post Hydrant
Joffre St.	Ludlow Hydrant

HYDRANTS CHANGED, 1920

Location	Taken Out	Set
Bodwell	Boston Post	Ludlow
Central, opp. Lyons	Ludlow	"
Gershom Ave., cor. Crawford	Chapman	"
Grand, cor. Daly	Flush	"
High, cor. Ea. Merrimack	"	"
Hutchinson	Ludlow	"
John	Chapman	"
Lewis, cor. Market	Flush	"
Liberty, cor. Hastings	"	"
Liberty, cor. School	"	"
Merrimack, opp. Green School	A. P. Smith	"
610 Middlesex	Ludlow	"
Newhall, cor. Crosby	Flush	"
Pawtucket, cor. Arlington	Pratt and Cady	"
Stevens, cor. Princeton	Flush	"
Stevens, opp. 233	"	"
31 West Ninth	"	"
Worthen, cor. Market	"	"
Opp. 341 Worthen	Chapman	"

19 Hydrants changed 1920

NEW SERVICES, 1920

No.	Kind	Feet	In.
123	¾ in. Galvanized Iron	4,885	9
12	1 in. Galvanized Iron	369	5
8	1½ in. Galvanized Iron	266	7
6	2 in. Galvanized Iron	201	2
39	¾ in. Lead Lined Iron	1,280	6
1	3 in. Wrought Iron	36	8
1	4 in. Cast Iron	162	9
4	6 in. Cast Iron	205	4
1	8 in. Cast Iron	57	8
<hr/>		<hr/>	
195		7,465	10

Total previously laid	569,329 feet
Total now laid	576,794-10 feet
Total number services laid	15,395
Total number cut off at main	1,104
Total number reconnected	102
Total number now in use	14,393
Average length of service	40.74 feet

SERVICES CHANGED — 1920

No.	Kind	CHANGED TO						Total	
		Gal. Iron $\frac{3}{4}$ in.	Gal. Iron 1 in.	Gal. Iron $1\frac{1}{2}$ in.	Gal. Iron 2 in.	L. L. $\frac{3}{4}$ in.	L. L. 1 in.	Feet	Inches
27	$\frac{3}{4}$ in. Iron	546-3						546	3
3	$\frac{3}{4}$ in. Iron					71-5		71	5
25	$\frac{3}{4}$ in. Iron	110-11						110	11
1	$\frac{3}{4}$ in. Iron						17-6	17	6
1	1 in. Iron						25-6	25	6
2	1 in. Iron					65-6		65	6
7	1 in. Iron		150-1					150	1
3	1 in. Iron	3038-6						3,038	6
1	$1\frac{1}{2}$ in. Iron	33						33	
3	$1\frac{1}{2}$ in. Iron			41-10				41	10
3	$1\frac{1}{2}$ in. Iron		48					48	
1	2 in. Iron				14			14	
51	$\frac{3}{4}$ in. T. L. I.	1277						1,277	
8	$\frac{3}{4}$ in. T. L. I.		244					244	
11	$\frac{3}{4}$ in. T. L. I.					219-11		210	11
3	1 in. T. L. I.		71-6					71	6
1	$1\frac{1}{2}$ in. T. L. I.		7					7	
10	$\frac{5}{8}$ in. Lead	148-2						148	2
2	$\frac{5}{8}$ in. Lead		107-8					107	8
23	$\frac{3}{4}$ in. Lead	295-11						295	11
1	1 in. Lead	10						10	
6	1 in. Lead		80					80	
3	1 in. Lead						43	43	
10	$\frac{3}{4}$ in. L. L. I.	248-10						248	10
1	1 in. L. L. I.		6-10					6	10
187		5597-8	826	41-10	14	347-10	86	6,913	4

METERS RUNNING JANUARY 1, 1921

Sizes in Inches	5/8"	3/4"	1"	1 1/2"	2"	3"	4"	6"	8"	Total
Columbia	64	1								65
Crown	3206	1649	332	26	47	7	7	5		5,279
Desper	14	4	3							21
Duplex	1		1			2				2
Empire	272	44	10	4	7	5	1			343
Empire Compound						1	1			2
Gem					5	1	4			10
Gem Empire										2
Hersey	2059	265	57	22	17	2	2	1	2	2,427
Hersey Detector						1	8	27	4	40
Keystone	63				1					64
King	80	3								83
Lambert	812	89	19		2					922
Nash	570	118	56		2					746
Niagara	1									1
Thompson	6	11	1							18
Torrent						1	2			3
Trident	573	34	1	1						609
Trident Protectus								1	1	2
Union	26	7								33
Watch Dog	955	56	36	11	17		1			1,076
Watch Dog Compound						2				2
Worthington	33		25	26	25	6	2			117
Worthington Disc	756	35	22	11	12	4				840
Total	9491	2316	563	101	135	30	30	34	7	12,707

HYDRANTS, JANUARY 1, 1921

Kind	Flush	2 Noz.	3 Noz.	4 Noz.	Total
Boston Machine	209	3	167		167
Chapman			114	51	168
Coffin			1		1
Corey			61		61
Eddy			32	1	33
Fairbanks			19		19
Flush					209
Glanmorgan			1		1
Holyoke			1		1
Kennedy			1		1
Lowrey					7
Ludlow		29	660	14	703
Michigan			4		4
O'Brien			1		1
A. P. Smith			47		47
Perkins				1	1
Pratt & Cady			25		25
Walker			17		17
Totals	209	32	1,151	67	1,466

LOW SERVICE — WATER PIPE LAID DURING THE YEAR 1920

Street	Location	Length of Pipe in Feet			
		4"	6"	8"	12"
Alma St.	From Riverside St., easterly			154.8	
Alma St.	From old end westerly			36.0	
Arcadia Ave.	From old end northerly		96.0		
Broadway	From Wilder St., westerly			359.3	495.0
Brown St.	From old end, northerly		10.0	182.0	
Bunker Hill St.	From West Sixth St., northerly		298.0		
Delard St.	From old end, northeasterly		314.0		
Delard St.	From old end, opp. Riverview Ave., southerly		48.0		
Fairgrove Ave.	From old end, northerly		48.0		
Groton St.	From Rogers St., northerly		353.0		
Howe St.	Fire Service, Dana Garage		14.0		
Jackson St.	Fire Service, Hamilton Co.		52.0		
Joffre St.	From Middlesex St., southerly		432.0		
Market St.	Fire Service to Courier Citizen		122.3		
Seneca St.	From old end, easterly		84.0		
Wilder St.	Service to Morey School	163.3			
		163.3	1871.3	732.10	495.0

HIGH SERVICE — WATER PIPE LAID DURING THE YEAR 1920

Street	Location	Length in Feet			
		4"	6"	8"	12"
Butman Rd.	From old end, opp. No. 145, southerly ..		156.0		

LOW SERVICE — WATER PIPE REMOVED DURING THE YEAR 1920

Street	Location	Length in Feet	
		6"	8"
Stackpole St.	East Merrimack to Brown	300.	

SMALL SIZE DISTRIBUTION PIPE LAID DURING THE YEAR 1920

Street	Location	Length in Feet		
		¾"	1"	1½"
Chase Ave.	From end old pipe, southerly		91.	
Chatham St.	From end old pipe, southerly		202.	
East Meadow Rd. ...	From end old pipe, westerly			108.
Grandview St.	From Mt. Pleasant St., easterly			217.
Linwood St.	From Midland St., southerly	20.4	92.5	
Unsworth St.	From Bunker Hill St., easterly			90.0
		20.4	385.5	415.

LOW SERVICE — LIST OF STOP GATES SET DURING THE YEAR 1920

Street	Location	Size				
		4"	6"	8"	10"	12"
Alma St.	On east line Riverside St., 13 ft. south of south line Alma St.			1		
Baldwin St.	9 ft. south of north line Princeton St., 26 ft. east of west line Baldwin St.		1			
Broadway	On Service to Weaving Co., 12 ft. north of south line Broadway			1		
Brown St.	On south line Stackpole St., 12 ft. west of east line Brown St.			1		
*Bunker Hill St.	16 ft. north of south line West Sixth St., 12 ft. east of west line Bunker Hill St.		1			
Central St.	78 ft. north of Floyd St., 9 ft. east of west line Central St. on Hydrant		1			
Gershom Ave.	On south line Moody St., 12 ft. east of west line Gershom Ave.		1			
Gershom Ave.	2 ft. north of north line Crawford St., 9 ft. east of west line Gershom Ave. on Hydrant		1			
Groton St.	On north line Rogers St., 10 ft. east of west line Groton St.		1			
High St.	38 ft. north of north line East Merrimack St., 13 ft. west of east line High St. on Hydrant		1			
*Howe St.	23 ft. north of north line Davidson St., 12 ft. east of west line Howe St. on Service		1			
*Jackson St.	5 ft. east of Hamilton Co. gate, 21 ft. north of south line Jackson St.		1			
*Joffre St.	18 ft. north of north line Middlesex St., 12 ft. east of west line Joffre St.		1			
*Joffre St.	On south line Middlesex St., 12 ft. east of west line Joffre St.		1			
John St.	68 ft. south of south line French St., 12 ft. east of west line John St. on Hydrant		1			
Lewis St.	On south line Market St., 7 ft. west of east line Lewis St. on Hydrant		1			
Liberty St.	52 ft. west of west line School St., 15 ft. south of north line Liberty St. on Hydrant		1			
Liberty St.	On west line Hastings St., 11 ft. south of north line Liberty St. on Hydrant		1			
*Market St.	16 ft. east of Merrimack Canal, 9 ft. south of north line Market St. on Service		1			
Stevens St.	Opp. No. 233, 9½ ft. east of west line Stevens St. on Hydrant		1			
Stevens St.	3 ft. south of south line Princeton St., 9½ ft. east of west line Stevens St. on Hydrant		1			
*Wilder St.	8 ft. north of north line Morey School Addition, 25 ft. east of west line Wilder St.	1				
Worthen St.	3 ft. south of south line Market St., 11 ft. east of west line Worthen St.		1			
		1	19	3		

LOW SERVICE — LIST OF STOP GATES REMOVED DURING THE YEAR 1920

Street	Location	Size				
		4"	6"	8"	10"	12"
Border St.	2 ft. east of east line Main St., 7 ft. north of south line Border St.		1			

LOW SERVICE — LIST OF HYDRANTS SET DURING THE YEAR 1920

Street	Kind	Location
Bunker Hill St. . .	Boston Post . . .	On end on west side opposite Unsworth St.
Groton St.	Boston Post . . .	On end on west side
High St.	Ludlow	On east side, 38 ft. north of East Merrimack St.
Stackpole St.	Ludlow	On south side at Brown St.
Joffre St.	Ludlow	On west side at end

LOW SERVICE — LIST OF HYDRANTS REMOVED DURING THE YEAR 1920

Street	Kind	Location
High St.	Flush	On west side corner East Merrimack St.
Stackpole St.	Ludlow	On north side at Whittier Mill
Stackpole St.	Flush	At No. 15

REPORT OF COMMISSIONER OF WATER WORKS 19

SUMMARY

Low Service water pipe laid in 1920	3,261.7 ft.
Low Service water pipe laid previous to 1920	798,938.8 ft.
	<hr/> 802,200.5 ft.
Low Service water pipe removed in 1920	300. ft.
Total Low Service water pipe in use Jan. 1, 1921	801,900.5 ft.
High Service water pipe laid in 1920	156. ft.
High Service water pipe laid previous to 1920	52,610. ft.
	<hr/> 52,766. ft.
High Service water pipe removed 1920	000. ft.
Total High Service water pipe in use Jan. 1, 1921	52,766. ft.
	<hr/>
Total High and Low Service Jan. 1, 1921	854,666.5 ft.
Total pipe in use Jan. 1, 1921, in miles	161.87

LOW SERVICE

4"	34,360.3 feet
6"	452,315.6 "
8"	163,516.4 "
10"	31,308.5 "
12"	71,747.8 "
16"	26,235.9 "
20"	8,659 "
24"	9,194 "
30"	4,563 "

HIGH SERVICE

4"	1,507 feet
6"	30,800.5 "
8"	4,758.5 "
10"	2,931 "
12"	7,885 "
16"	4,884 "

Total 801,900.5 "

52,766.0 "

Low Service Hydrants set in 1920	5
High Service Hydrants set in 1920	0
Low Service Hydrants removed in 1920	3
High Service Hydrants removed in 1920	0

	SIZE					
	4"	6"	8"	12"	16"	
Low Service Stop Gates set in 1920	1	19	3	0	0	= 23
Low Service Stop Gates removed in 1920	0	1	0	0	0	= 1
High Service Stop Gates set in 1920	0	0	0	0	0	= 0
High Service Stop Gates removed in 1920	0	0	0	0	0	= 0

METERS

Meters running January 1, 1920	12,445
New Meters set 1920	274
Meters condemned 1919—Replaced 1920	1
Meters discontinued	8
Meters condemned and not replaced	5
Total increase for year	262

Meters running January 1, 1921	12,707
Meters condemned and replaced	24
Private meters sold	22
Private meters repaired	10
Meters changed	15
Meters stopped	1,145
Meters frozen and repaired	269
Meters stored at shop	42
Meters leaking	63
Meters out for test	13
Meters discontinued	8
Temporary meters set	4

Respectfully submitted,

ROBERT GARDNER,

Superintendent.

Report of the City Engineer

OFFICE OF THE CITY ENGINEER,

LOWELL, MASS., January 1, 1921.

To the Commissioner of Water Works and Fire

Protection:

DEAR SIR:—

I have the honor to submit the forty-eighth annual report for the year ending December 31, 1920:

PUMPAGE

Total Net Pumpage for 1920	2,620,913,964 gallons
Total Net Pumpage for 1919	2,439,555,402 gallons
Increase in 1920	181,358,562 gallons

CONSUMPTION

Consumption in 1920	2,614,818,710 gallons
Consumption in 1919	2,449,778,387 gallons
Increase in 1920	165,040,323 gallons

The maximum pumpage for any one day was on Wednesday, Feb. 4th, viz.:

At West Sixth Street Station	5,730,700 gallons
At Cook Wells Station	3,230,208 gallons
Total	8,960,908 gallons

22 REPORT OF COMMISSIONER OF WATER WORKS

The maximum pumpage for one week was of the week of February 1st to February 7th, viz.:

At West Sixth Street Station	39,167,142 gallons
At Cook Wells Station	22,302,720 gallons

Total	61,469,862 gallons
High Service Pumpage for 1920, estimated	39,912,100 gallons
High Service Pumpage for 1919, Pump record	167,502,188 gallons
Cost of Low Service Pumpage in 1920	\$38.65 per million gals.
Cost of Low Service Pumpage in 1919	\$29.86 per million gals.
Increase in 1920	\$ 8.79 per million gals.
Cost of High Service Pumpage in 1920	\$67.33 per million gals.
Cost of High Service Pumpage in 1919	\$27.23 per million gals.
Cost of Low Service Pumpage, exclusive of Cook Wells, in 1920	\$37.80 per million gals.
Total Cost of High Service Pumpage (Cost of Low Service plus Cost of High Service, exclusive of Cook Wells), in 1920	\$105.85 per million gals.

TABLE SHOWING QUANTITY PUMPED EACH MONTH AT THE SEVERAL STATIONS DURING THE YEAR 1920

Mos.	PUMPING STATIONS										Grand Totals	Net Totals
	Driven Wells					West Sixth Street						
	Cook Wells	Pawtucket Boulevard			Net Totals	Worthington Low Duty	Allis-Chalmers	Total Low Service	High Service			
		Holly Pump	Kerr Turbine	Totals								
Jan. . . .	72,333,632	174,120,000	174,080,970	348,200,970	72,333,632		176,353,470	176,353,470	2,805,500	599,693,572	248,687,102	
Feb. . .	89,367,360	149,100,000	149,072,870	298,172,870	89,367,360		151,139,565	151,139,565	2,404,100	541,083,895	240,506,925	
Mar. . .	71,223,552	169,755,000	169,201,367	338,956,367	71,223,552		169,315,900	169,315,900	3,072,100	582,567,919	240,539,452	
April . .	5,544,448	193,725,000	193,409,500	387,134,500	5,544,448		201,487,450	201,487,450	3,120,000	597,286,398	207,031,898	
May . . .	6,075,072	201,469,350	201,139,850	402,609,200	6,075,072	20,330,000	190,404,980	210,734,980	3,084,500	622,503,752	216,810,052	
June . . .	51,904,000	146,185,000	144,942,150	291,127,800	51,904,000	142,210,000		142,210,000	2,394,000	487,635,800	194,114,000	
July . . .	41,340,480	164,850,000	164,098,150	328,948,150	41,340,480	38,674,000	132,489,796	171,163,796	3,431,700	544,884,126	212,504,276	
Aug. . . .		221,670,000	221,114,500	442,784,500			230,179,969	230,179,969	3,878,100	676,842,569	230,179,969	
Sept. . .		208,545,000	208,084,500	416,629,500			219,793,055	219,793,055	3,813,000	640,235,555	219,793,055	
Oct. . . .		211,020,000	210,240,500	421,260,500			218,038,180	218,038,180	3,918,400	643,217,080	218,038,180	
Nov. . .		185,925,000	185,418,000	371,343,000			197,765,447	197,765,447	3,660,000	572,768,447	197,765,447	
Dec. . . .		185,190,000	184,834,700	370,024,700			194,943,608	194,943,608	4,330,700	569,299,008	194,943,608	
Totals	337,788,544	2,211,555,000	2,205,637,057	4,417,192,057	337,788,544	201,214,000	2,081,911,420	2,283,125,420	39,912,100	7,078,018,121	2,620,913,964	

TABLE SHOWING SOURCE OF SUPPLY, QUANTITY PUMPED, AND COST OF
PUMPING AT THE SEVERAL STATIONS DURING THE YEAR 1920

Pumping Station	Source of Supply — Well Water				Cost	
	555 Driven Wells at Pawtucket Boulevard	210 Driven Wells in Valley of River Meadow Brook	Distributing Mains of Low Service System	Totals in U. S. Gallons	Totals	Per Million Gallons
West Sixth Street — Low Service	2,283,125,420			2,283,125,420	\$41,787.12	18.30
High Service			39,912,100	39,912,100	2,687.04	67.33
Cook Wells		337,788,544		337,788,544	14,996.64	44.40
Lower Boulevard	2,205,637,057			2,205,637,057	44,516.51	20.18
Total Pumpage				4,866,463,121	103,987.31	21.37
Deduct Quantity at Lower Boulevard	2,205,637,057		39,912,100	2,245,549,157		
Pumped by High Service.						
Net Pumpage						
Cost exclusive of High Service				2,620,913,964	103,987.31	39.68
Cost exclusive of High Service and Cook Wells				2,620,913,964	101,300.27	38.65
Total Cost High Service Pumpage				2,283,125,420	86,303.63	37.80
				39,912,100	4,224.30	105.85

The following tables, showing the performance of the engines, depth and quantity of water in the Beacon Street Reservoir and Christian Street, Reservoir, average temperature of the air and water at the Christian Street Reservoir, and the average monthly and daily consumption of water have been calculated and compiled from the records kept by the engineers and gate-keeper.

TABLE SHOWING WORK DONE WITH ALLIS-CHALMERS ENGINE, AT WEST
SIXTH STREET PUMPING STATION FOR EACH MONTH
DURING THE YEAR 1920

Months	No. of days Pumping	Average No. of hours Pumping per day	No. of hours Pumping Month	No. of strokes made per Month	Average No. of strokes made per Minute	Average head including friction in feet	Quantity Pumped in U. S. Gallons	Average Quantity Pumped Per day in U.S. Gallon	No. Gals. pumped into res. per lb. total coal consumed	Duty in lbs. 1 foot high coal used in Pumping only no deduction for ashes or clinkers	Duty on total coal consumed no deduction for ashes or clinkers
January	31	24-00	744	1,268,730	28.40	184.09	176,353.470	5,688.821	1,054	161,599,641	161,599,641
February	29	24-00	696	1,087,335	26.10	190.87	151,139,565	5,211,709	1,163	184,821,005	184,821,005
March	31	23-40	734	1,218,100	27.68	190.87	169,315,900	5,461,803	1,000	160,191,706	160,191,706
April	30	23-34	707	1,449,550	34.15	190.87	201,487,450	6,716,248	805	128,054,894	128,054,894
May	27	23-31	635	1,369,820	35.90	190.87	190,404,980	7,052,036	770	122,225,410	122,225,410
June	0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
July	23	23-08	532	953,104	30.81	190.87	132,489,796	5,760,426	968	154,851,495	154,851,495
August	31	23-54	741	1,655,971	37.21	190.87	230,179,969	7,425,160	877	139,628,261	139,628,261
September	30	23-26	703	1,581,245	37.50	190.87	219,793,055	7,326,435	886	141,208,347	141,208,347
October	31	23-54	741	1,568,620	35.05	190.87	218,038,180	7,033,489	928	147,423,430	147,423,430
November	30	23-51	715½	1,422,773	33.15	190.93	197,765,447	6,591,181	855	135,933,696	135,933,696
December	31	23-14	720	1,402,472	31.70	193.17	194,943,608	6,288,503	1,030	165,847,278	165,847,278
Totals and Averages	324	23-40	7,668½	14,977,780	33.00	190.45	2,081,911,420	6,425,652	930	147,710,416	147,710,416

TABLE SHOWING WORK DONE WITH DEAN ENGINES AT COOK WELLS
PUMPING STATION, FOR EACH MONTH DURING THE YEAR 1920

Months	No. of days pumping	Average No. of hours pumping per day	No. of hours pumping per month	No. of strokes made per month	Average No. of strokes made per minute	Average head including friction in feet	Quantity pumped per month in U. S. Gallons	Average quantity pumped per day in U. S. Gallon	No. Gallons pumped into distributing mains per lb. total coal consumed	Duty in lbs. 1 ft. 100 lbs. total coal used, no deduction per lb. for ashes or clinkers
January	31	24-00	744	1,130,213	25.32	171.68	72,333,632	2,333,343	208	29,837,448
February	29	24-00	696	1,396,365	33.45	170.86	89,367,300	3,081,633	220	31,377,297
March	31	23-09	718	1,112,868	25.87	181.92	71,223,552	2,297,534	210	31,935,049
April	5	17-00	85	86,632	17.00	193.88	5,544,448	1,108,890	221	35,873,483
May	4	20-30	82	94,930	19.30	168.58	6,075,072	1,518,768	202	28,481,203
June	30	24-00	720	811,000	19.20	165.47	51,904,000	1,730,133	269	35,753,851
July	24	24-00	576	645,945	18.70	165.80	41,340,480	1,722,520	282	38,927,852
August	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
September	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
October	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
November	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
December	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Totals and Averages	154	23-31	3,621	5,277,946	24.30	168.03	337,788,544	2,193,432	226	31,699,937

TABLE SHOWING WORK DONE WITH HOLLY HIGH DUTY ENGINE (CRANK
AND FLY WHEEL) AT LOWER BOULEVARD PUMPING STATION FOR
EACH MONTH DURING THE YEAR 1920

Months	No. of days Pump- ing	Average No. of hours Pumping per day	No. of hours Pumping per month	No. of strokes made per month	Average No. of strokes made per minute	Average head including friction in feet	Quantity pumped in U. S. Gallons	Average Quantity Pumped per day in U. S. Gallons
January	31	23-49	738½	1,160,800	26.19	57.88	174,120,000	5,616,774
February	29	23-57	695	994,000	23.82	57.47	149,100,000	5,141,379
March	31	23-40	733¾	1,131,700	25.70	57.25	169,755,000	5,475,968
April	30	23-20	700	1,291,500	31.50	56.50	193,725,000	6,457,500
May	31	23-50	736	1,343,129	30.85	55.58	201,469,350	6,499,011
June	30	23-28	704	974,571	22.73	50.69	146,185,650	4,872,855
July	31	23-02	714	1,099,000	25.67	50.26	164,850,000	5,317,741
August	31	23-14	735¾	1,477,800	33.50	54.70	221,670,000	7,150,645
September	30	23-06	693¾	1,390,300	33.43	56.14	208,545,000	6,951,500
October	31	23-33	730	1,406,800	32.12	56.14	211,020,000	6,807,097
November	30	23-51	715½	1,239,500	28.87	53.93	185,925,000	6,197,500
December	31	23-36	731¾	1,234,600	28.12	53.68	185,190,000	5,973,871
Totals and Averages	366	23-34	8,027½	14,743,700	28.48	55.00	2,211,555,000	6,042,500

TABLE SHOWING AMOUNT OF COAL USED
FOR ALLIS-CHALMERS ENGINE AT PUMPING
STATION, WEST SIXTH STREET,
DURING THE YEAR 1920

Months	COAL CONSUMED			
	For Starting Fires in pounds	When Pumping in pounds	For Banking Fires in pounds	Total in pounds
January		167,223		167,223
February		130,223		130,223
March		168,313		168,313
April		250,560		250,560
May		248,072		248,072
June				
July		136,247		136,247
August		262,515		262,515
September		247,864		247,864
October		235,519		235,519
November		231,750		231,750
December		189,436		189,436
Totals		2,240,693		2,240,693

TABLE SHOWING AMOUNT OF COAL USED
FOR DEAN ENGINES AT PUMPING
STATION, COOK WELLS, DURING
THE YEAR 1920

Months	COAL CONSUMED			
	For Starting Fires in pounds	When Pumping in pounds	For Banking Fires in pounds	Total in pounds
January		347,000		347,000
February		406,000		406,000
March	1,600	336,900		338,500
April		25,000		25,000
May	1,600	28,400		30,000
June	1,600	198,810		200,410
July		146,900		146,900
August				
September				
October				
November				
December				
Totals	4,800	1,489,010		1,493,810

TABLE SHOWING AMOUNT OF COAL USED
FOR HOLLY ENGINE AND KERR TUR-
BINE, AT BOULEVARD PUMPING
STATION, DURING THE YEAR 1920

Months	COAL CONSUMED				Gals. pumped into conduit per lb. total coal consumed
	For Starting Fires in pounds	When Pumping in pounds	For Banking Fires in pounds	Total in pounds	
January	500	260,990		261,490	666
February	1,000	225,340		226,340	660
March	1,000	268,620		269,620	628
April		278,330		278,330	695
May	1,000	284,035		285,035	705
June	1,000	197,810		198,810	728
July		215,125		215,125	763
August	1,500	280,470		281,970	748
September		264,665		264,665	786
October		269,505		269,505	780
November		251,760		251,760	737
December		255,870		255,870	723
Totals	6,000	3,052,520		3,058,520	723

WEST SIXTH STREET PUMPING STATION, ALLIS-CHALMERS
ENGINE; RUNNING EXPENSES FOR THE YEAR 1920

Pay of Engineers and Firemen	\$17,909.23
27. 1120-2240 tons (1919) coal at \$11.89	326.95
200. 139-2240 tons (1920) coal at \$12.04	2,409.92
896. 554-2000 tons (1920) coal at \$14.06	12,598.86
Engine Repairs	236.62
Boiler Repairs	1,547.56
Elec. Engine Repairs	206.34
Supplies	1,236.66
Sundries	214.98
<hr/>	
Total	\$36,687.12

Cost of pumping water into reservoir, per million gallons, \$17.62+

Cost of pumping water 1 foot high, per million gallons, \$0.09 25/100.

WEST SIXTH STREET PUMPING STATION, HIGH SERVICE
ENGINE; RUNNING EXPENSES FOR THE YEAR 1920

Pay of Engineers and Firemen	\$ 339.80
3. 1288-2240 tons of coal (1919) at \$11.89	42.50
26. 1777-2240 tons of coal (1920) at \$12.04	322.71
118. 70-2000 tons of coal (1920) at \$14.06	1,651.26
Supplies	114.05
Engine Repairs	216.72
<hr/>	

Total

\$2,687.04

Cost of pumping water into reservoir, per million gallons, 67.33+

Cost of pumping water 1 foot high, per million gallons, \$1.17 21/100.

COOK WELLS PUMPING STATION, DEANE ENGINES:
RUNNING EXPENSES FOR THE YEAR 1920

Pay of Engineers and Firemen	\$5,726.70
27. 000-2240 tons of coal (1919) at \$8.28	223.56
143. 666-2000 tons of coal (1920) at \$11.71	1,678.39
511. 2024-2240 tons of coal (1920) at \$13.51	6,915.77
Engine Repairs	31.20
Boiler Repairs	252.77
Supplies	69.27
Sundries	98.98

Total \$14,996.64

Cost of pumping water into distributing mains, per million gallons,
\$44.39+

Cost of pumping water 1 foot high, per million gallons, \$0.26 42/100

LOWER BOULEVARD PUMPING STATION, HOLLY ENGINE AND
KERR TURBINE, RUNNING EXPENSES FOR
THE YEAR 1920

Pay of Engineers and Firemen	\$19,417.19
60. 000-2240 tons of coal (1919) at \$9.87	592.00
536. 2183-2240 tons of coal (1920) at \$11.62	6,238.86
865. 529-2000 tons of coal (1920) at \$16.13	13,954.82
Engine Repairs	357.59
Boiler Repairs	2,636.87
Supplies	938.54
Sundries	380.64

Total \$44,516.51

Cost of pumping water into conduit, per million gallons, \$20.18+

Cost of pumping water 1 foot high, per million gallons, \$0.36 70/100

WEST SIXTH STREET PUMPING STATION, WORTHINGTON
 DUPLEX ENGINE; RUNNING EXPENSES FOR THE
 YEAR 1920

Pay of Engineers and Firemen	\$1,738.95
5. 1736-2240 tons of coal (1919) at \$11.89	68.66
42. 695-2240 tons of coal (1920) at \$12.04	509.66
189. 1103-2000 tons of coal (1920) at \$14.06	2,664.69
Supplies	116.40
Sundries	2.37
<hr/>	
Total	\$5,100.73
Cost of pumping water into reservoir per million gallons, \$25.35 +	
Cost of pumping water 1 foot high per million gallons, \$0.15 10/100	

BEACON STREET RESERVOIR — 1920

Months	Depth in feet	Quantity in U. S. Gallons	Temperature in Degrees	
			of Water	of Air
January	18.39	27,820,325	36.5	18.4
February	19.48	29,636,886	34.2	25.0
March	20.32	31,061,448	35.6	26.9
April	20.82	31,912,341	43.8	44.2
May	20.79	31,859,014	55.4	55.3
June	20.15	30,770,083	64.1	66.2
July	19.80	30,179,386	70.6	72.6
August	18.69	28,313,381	74.3	72.5
September	18.74	28,400,055	67.1	63.8
October	18.85	28,582,275	59.5	57.7
November	19.28	29,304,823	45.1	38.3
December	19.09	28,990,960	34.7	31.3

CHRISTIAN STREET RESERVOIR — 1920

Months	Elevation of Water	Quantity in U. S. Gallons	Temperature in Degrees	
			of Water	of Air
January	197.39	2,011,861	48.0	18.4
February	195.65	1,656,632	48.0	25.0
March	205.20	3,606,138	48.0	26.9
April	204.41	3,445,545	47.9	44.2
May	203.67	3,293,455	47.0	55.3
June	195.42	1,608,779	49.0	66.2
July	196.84	1,899,130	53.2	72.6
August	200.62	2,671,270	57.2	72.5
September	203.50	3,259,421	60.5	63.8
October	206.91	3,956,053	62.2	57.7
November	207.35	4,045,390	60.1	38.3
December	206.41	3,853,951	56.1	31.3

TABLE SHOWING THE AVERAGE MONTHLY
AND DAILY CONSUMPTION OF WATER
FOR THE YEAR 1920

Months	Gallons per Month	Gallons per Day
January	247,184,593	7,973,696
February	236,747,230	8,163,698
March	235,598,484	7,599,951
April	207,165,240	6,905,508
May	218,875,318	7,060,494
June	195,811,042	6,527,035
July	214,266,219	6,911,813
August	228,641,345	7,375,527
September	220,407,793	7,346,926
October	214,896,231	6,932,137
November	198,817,217	6,627,241
December	196,407,998	6,335,741
Totals and Averages	2,614,818,710	7,144,313

The following table shows the average daily consumption of water, in gallons, for each month and each year from January 1900 to January 1921.

SUMMARY OF STATISTICS

FOR THE YEAR ENDING DECEMBER 31, 1920.

In form recommended by the New England Water Works
Association

LOWELL WATER WORKS

LOWELL, MIDDLESEX COUNTY, MASSACHUSETTS

GENERAL STATISTICS

Population by census of 1920, 112,759.

Date of construction, 1870 to 1873.

Date of construction, High Service, 1881.

Date of construction, Driven Wells, 1893 to 1919.

By whom owned? The City of Lowell.

Source of supply: Two hundred ten (210) driven wells in the valley of
River Meadow Brook, and five hundred fifty-five (555) driven
wells at Pawtucket Boulevard.

Mode of supply: Pumping to reservoir and pumping direct.

PUMPING STATISTICS

1. Builders of Pumping Machinery.

AT WEST SIXTH STREET STATION

One engine, capacity 5,000,000 gallons in twenty-four hours, Henry
R. Worthington.

One engine, capacity 8,000,000 gallons in twenty-four hours, Allis-
Chalmers Company.

AT COOK WELLS STATION, TEMPORARY PUMPS

One engine, capacity 3,000,000 gallons in twenty-four hours, The Deane Steam Pump Company.

One engine, capacity 3,000,000 gallons in twenty-four hours, The Deane Steam Pump Company.

AT LOWER BOULEVARD STATION

One engine, capacity 8,000,000 gallons in twenty-four hours, The Holly Manufacturing Company.

One engine, capacity 8,000,000 gallons in twenty-four hours, The Holly Manufacturing Company.

One engine, capacity 7,000,000 gallons in twenty-four hours, The Kerr Turbine Company.

One engine, capacity 10,000,000 gallons in twenty-four hours, The Kerr Turbine Company.

2. Descriptions of fuel used: {
- a. Kind, Bituminous.
 - b. Brand of coal, New River.
 - c. Average price of coal per gross ton delivered, \$14.74.
 - d. Percentage of ash.
 - e. Wood, price per cord.

3. Coal consumed for the year, 9,043,539.

4. Pounds of wood $\div 3$ = equivalent amount of coal.

5. Total equivalent coal consumed for the year (3) + (4) 9,043,539 pounds.
6. Total pumpage for the year, 4,866,463,121 gallons.
7. Average static head against which Low Service pumps at West Sixth Street work, 173.63 feet.

Average static head against which pump at Lower Boulevard works, 43.57 feet.
8. Average dynamic head against which pumps work:

West Sixth Street, Low Service	190.45
West Sixth Street, High Service	57.44
Lower Boulevard	55.00
9. Number of gallons pumped per pound of equivalent coal (5) = 538.
10. Cost of pumping per million gallons, figured on pumping station expenses, viz., \$103,987.31, \$21.37.
11. Cost of purifying per million gallons, figured on filter expenses, viz., \$16,235.43, \$7.36+.

STATISTICS OF CONSUMPTION OF WATER

1. Estimated total population at date, 112,759.
2. Estimated population on lines of pipe, 112,759.
3. Estimated population supplied, 112,759.
4. Total consumption for the year, 2,614,818,710 gallons.
5. Passed through meters, 1,566, 968,744 gallons.
6. Percentage of consumption metered, 59.93.
7. Average daily consumption, 7,144,313 gallons.
8. Gallons per day to each inhabitant, 63.4.
9. Gallons per day to each consumer, 63.4.
10. Gallons per day to each tap, 496.45.
11. Cost of supplying water per million gallons, figured on total maintenance, \$102.93.
12. Total cost of supplying water per million gallons, figured on total maintenance and interest on bonds, \$124.79.

STATISTICS RELATING TO DISTRIBUTION SYSTEM

Mains

1. Kind of pipe, cast iron.
2. Sizes, 4 inches to 30 inches.
3. Extended 3,417.7 feet during the year.
4. Total now in use, 161.87 miles.
5. Length of pipe less than 4 inches diameter, $4\frac{1}{2}$ miles, more or less.
6. Number of hydrants added during the year (public and private), 2.
7. Number of hydrants (public and private) now in use, 1,466.
8. Number of stop gates added during the year, 22.
9. Number of stop gates now in use, 2,170.
10. Number of stop gates smaller than 4 inches, 56.
11. Number of blow-offs, 33.
12. Range of pressure on mains, 27 lbs. to 82 lbs., Low Service.

SERVICES

13. Kind of pipe, lead, lead-lined iron, iron and tin-lined iron.
14. Sizes, $\frac{5}{8}$ in. to 8 in.
15. Extended, 7,465.8 feet.
16. Total now in use, 109.24 miles.
17. Number of Service Taps added during the year, 195.
18. Number now in use, 14,393.
19. Average length of service, 38.28 feet.
20. Average cost of service for the year, \$51.67.
21. Number of meters added, 272.
22. Number now in use, 12,707.
23. Percentage of services metered, 88.3%.
24. Percentage of receipts from metered water, 93.9%.

The Worthington High Service Pump became incapacitated for further service during the month of May; it had been in constant operation since its installation in the year 1881, hence it became necessary to use reservoir records in order to estimate the amount of water used by High Service System. This amount was found to be considerable less than the pump records had shown, which accounts for the increased cost per million gallons of High Service water.

Respectfully submitted,

STEPHEN KEARNEY,

City Engineer.

ANNUAL REPORT

OF THE

Births, Marriages and Deaths

OF THE

CITY OF LOWELL



FOR THE YEAR

1920

CITY OF LOWELL

OFFICE OF THE CITY CLERK, May 3, 1921

To the Municipal Council,

GENTLEMEN:

The annual report of Births, Marriages and Deaths for the year 1920, as of record in this office, is respectfully submitted as follows:

BIRTHS										
Wards	1	2	3	4	5	6	7	8	9	Total
Whole Number	197	423	304	286	315	768	291	247	229	3060
Males	92	222	152	166	165	374	151	118	110	1550
Females	105	201	152	120	150	394	140	129	119	1510
American Parents	90	62	143	90	87	206	132	141	116	1067
Foreign Parents	48	322	82	160	191	334	89	49	49	1324
American Father Foreign Mother	19	13	31	18	18	103	38	24	33	297
Foreign Father American Mother	40	26	48	18	19	125	32	33	31	372
Twins	2	8	5	4	3	7	2		1	27
Triplets		1								1

In addition 96 births are recorded, the parents being residents elsewhere, and 39 births occurring elsewhere of parents residents of Lowell. Still-births not included 120.

MARRIAGES

Fourteen hundred and twenty-three marriages were recorded in the year 1920, twelve hundred and twenty-one of which were solemnized in Lowell and two hundred and two solemnized elsewhere.

MARRIAGES BY MONTHS

January.....	99	May.....	99	September	162
February.....	107	June	218	October	156
March.....	32	July.....	97	November.....	118
April.....	160	August.....	117	December.....	58

NATIONALITY OF CONTRACTING PARTIES

	Grooms	Brides
United States.....	890	905
Canada.....	188	192
Greece.....	98	93
Russia and Austria	66	58
Ireland.....	40	48
Portugal, Azores and Madeira.....	39	41
England.....	32	31
Italy.....	20	12
Scotland	5	9
Sweeden.....	9	3
Other Countries.....	37	30

Grooms under 21 years 91; Brides under 18 years 48.

DEATHS

The number of deaths in the city returned and recorded in 1920, exclusive of still-births, was 1770; males 892; females 878; fifty-one of this number being non-residents.

The deaths of 135 Lowell residents who died elsewhere being also recorded. Still-births 120.

Detailed statistics relative to deaths are contained in Report of Board of Health.

Very respectfully,

STEPHEN FLYNN,

City Clerk.

FORTY-THIRD ANNUAL REPORT

OF THE

BOARD OF HEALTH

OF THE

CITY OF LOWELL



For the Year

1920

ORGANIZATION, 1920

BOARD OF HEALTH

PIERRE BRUNELLE, M. D., Chairman
THOMAS F. CARROLL, M. D.
JOHN E. DRURY

HEALTH DEPARTMENT OFFICERS

Office Employees

FRANCIS J. O'HARE, Agent
SPENCER D. BROWN, Fumigator
JOHN N. DRURY, M. D., Tuberculosis Examining Physician
WILLIAM A. JOHNSON, M. D., Vaccinating Physician
HAROLD L. LELAND, M. D., Attending Physician Genito-Urinary
Clinic
JAMES Y. RODGER, M. D., Bacteriologist
BERTHA M. KIRWIN, R. N., Tuberculosis Nurse
MARY A. LYNCH, R. N., Nurse Genito-Urinary Clinic
ANNA A. O'DWYER, Child Welfare Nurse to Oct. 2, 1920.
LOIS A. TITCOMB, R. N., Child Welfare Nurse
HELEN V. TOMPKINS, R. N., Child Welfare Nurse
ELLEN E. McEVOY, Clerk to May 25, 1920
KATHARINE W. SNOW, Registrar
NAPOLEON MILOT, Nurse Genito-Urinary Clinic.

INSPECTORS

WILLIAM H. CONNORS, General Inspector
STEPHEN GARRITY, Plumbing Inspector—Died May 14, 1920
WILLIAM F. RYAN, Plumbing Inspector
CHARLES N. MIDWOOD, Plumbing Inspector
CLEMENT A. HAMBLET, M. D. V., Inspector of Meats and Pro-
visions
JOHN KEARNEY, Health Inspector

MILK DEPARTMENT

MELVIN F. MASTER, B. C., Milk Inspector

JOHN J. COUGHLIN, Collector of Samples

PRIVATE SCHOOL PHYSICIANS

HOWARD W. JEWETT, M. D.

RODRIGUE MIGNAULT, M. D.

FREDERICK P. MURPHY, M. D.

RALPH C. STEWART, M. D.

LOWELL, MASS., Jan. 1, 1921.

To the Honorable Mayor and Members of the Municipal Council of the City of Lowell, Massachusetts.

GENTLEMEN :—

The Board of Health respectfully submits the forty-third annual report for the year ending Dec. 31, 1920.

The total deaths from all causes in Lowell during the year was 1770 and this includes persons visiting our city temporarily, and is exclusive of still births.

The Federal census of 1920 gave Lowell a population of 112,759, and by this increase the death rate per 1000 population was 15.69 which is the lowest death rate since 1850.

With the opening of the Tuberculosis Hospital, the Board decided it would be the policy of economy and efficiency to abandon the "Cottage Hospital" in Chelmsford Street, which was in use for the care of other contagious diseases, and set aside one of the pavilions at the Tuberculosis Hospital as a contagious ward. As it later proved, this was a very fortunate move in the right direction, as the department was called upon during the latter months of the year to provide for the care and treatment of some thirty or more cases of contagious diseases that occurred in one of the local orphanages.

But this temporary arrangement for the care of such cases cannot continue, as the demands of the department for the admission of tubercular cases will be so great that the contagious ward will have to be abandoned.

Therefore, the members of the Board respectfully call the attention of the Mayor and the members of the

Municipal Council to the situation that confronts our city in the near future in not having adequate facilities for the care of cases of contagion other than tuberculosis, and the great necessity of making tentative plans for a new building.

There were two changes in the office personnel of the department during the year. In the passing of Stephen Garrity, inspector of plumbing for the past thirty years, the city lost a much esteemed public official. He was a man of splendid loyalty to his friends, of sterling citizenship, simple tastes and a kindly disposition. Charles N. Midwood was appointed to fill his position.

Miss Anna C. O'Dwyer, who served the department so efficiently as a child-welfare nurse, resigned to accept a position as school nurse.

The members of the Board wish to express their appreciation to the Mayor and the members of the Municipal Council as well as the heads of the various departments, for the advice and co-operation given the department during the year. It is also the wish of the Board to say that they are very much gratified with the co-operation given by the Anti-Tuberculosis Association, the Lowell Guild, the Red Cross Chapter, school nurses, police women, social workers and all other agencies interested in public health work.

PIERRE BRUNELLE, M. D., Chairman,
THOMAS F. CARROLL, M. D.,
JOHN E. DRURY,

Board of Health.

REPORT OF WORK DONE BY BACTERIOLOGICAL LABORATORY DURING YEAR 1920

LOWELL, MASS., Jan. 1, 1921

*Board of Health,
Lowell, Mass.*

GENTLEMEN:

I have the honor to submit a report of the work done by me in the Bacteriological Laboratory during the year 1920:

DIPHTHERIA

Examination of Cultures

	For Diagnosis		For Release		No Result	Whole Number
	Positive	Negative	Positive	Negative		
January	40	229	15	31	2	317
February	13	103	3	35	0	154
March	15	74	5	15	1	110
April	11	63	3	17	0	94
May	9	74	2	10	3	98
June	9	51	3	8	6	77
July	5	25	0	5	0	35
August	10	40	2	18	1	71
September	7	32	1	10	5	55
October	24	69	1	11	3	108
November	40	156	11	44	6	257
December	46	141	13	66	1	267
	<hr/> 229	<hr/> 1057	<hr/> 59	<hr/> 270	<hr/> 28	<hr/> 1643

TUBERCULOSIS

Examinations of Specimens of Sputum

	Positive	Negative	Total
January	11	21	32
February	2	23	25
March	3	44	47
April	13	29	42
May	0	40	40
June	11	39	50
July	0	40	40
August	0	39	39
September	3	20	23
October	2	43	45
November	11	44	55
December	28	28	56
	—	—	—
	84	410	494

TYPHOID FEVER

Examination of Blood for Widal Reaction

	Positive	Negative	Atypical	No Result	Total
January	1	5	1	0	7
February	0	5	0	0	5
March	1	3	0	0	4
April	2	1	0	0	3
May	0	3	0	0	3
June	3	15	0	1	19
July	5	10	1	0	16
August	2	11	0	0	13
September	7	6	0	1	14
October	2	9	0	0	11
November	0	14	0	0	14
December	2	4	—	—	6
	—	—	—	—	—
	25	86	2	2	115

CEREBRO-SPINAL MENINGITIS

There were 10 examinations made, five of which were positive and five negative.

MALARIA

There was one examination made, which proved to be negative.

OPHTHALMIA NEONATORUM

There were 13 examinations made, five of which were positive, and eight negative.

GONORRHŒA

Eighty-five examinations were made, 21 of which were positive and 64 negative.

One test was made for Vincent's Angina, which was negative.

General examinations were made in three cases of various materials, pus, blood and exudates.

Respectfully submitted,

JAMES Y. RODGER, M. D.,

Bacteriologist.

REPORT OF INSPECTOR OF MILK

To the Lowell Board of Health.

GENTLEMEN:—

I have the honor to present the report of the Department of Milk, Vinegar and Oleomargarine for the twelve months beginning Jan. 1, 1920.

There were six hundred and thirty-seven stores licensed to sell milk after an inspection had been made. Fifty dealers were issued wagon licenses after their milk plants had been inspected and scored (U. S. Dept. of Agri., Bureau of Animal Industry. Dairy Div. score card was used) while eleven dealers were refused licenses after a score and an inspection was made. Sixty stores were issued Oleomargarine licenses. Three hundred and seventy-three dollars and fifty cents received from licenses, were paid over to the City Treasurer during the year.

Three thousand three hundred and fifty-eight samples of milk; twenty-nine samples of vinegar; nine samples of butter; thirty-six samples of ice cream have been analyzed. One thousand five hundred and seventeen samples of milk were tested for sediment by means of a Wisconsin Milk Sediment Tester and sediment cottons. Bacterial examinations were made on three hundred and eighty-seven samples of milk. Several articles of fruit or food were examined for the Health Department, as well as drugs and numerous samples of liquid submitted by the Police Department.

Samples of milk were seized from eight hundred and twenty-two wagons; one hundred and one stores and seventy-two restaurants or lunch rooms. Eight hundred and sixty-seven visits to stores or restaurants were made. Fifty-six dairy farms were visited. Two hundred and

nine inspections of milk plants were made. Seventeen train inspections were made. One thousand and fifty-six letters containing blank milk license applications were mailed during the month of February. Three hundred and twenty-six letters of warning were sent during the year for minor violations of the Milk Laws. Six prosecutions resulted in convictions, the fines ranging from \$10 to \$50. Eleven questionnaires on milk were received and answered. Graphical records of the percentages of solids and fats of the samples seized were made. One graphical record shows all percentages of solids and fats of samples seized; another shows the average percentage daily; others show all percentages of solids and fats of samples seized from each milk dealer.

This department investigates all complaints received from the public relative to violation of the milk and some of the food laws, and if the complainant has the necessary evidence, makes such prosecutions as may be necessary. Valuable complaints are sometimes received from the public. If this department does not have the authority to enforce the law the complainant is told what department has. The services of the department are open to the public of Lowell for such analyses as may be of purely public benefit, but the person submitting samples for examination must expect to be closely questioned relative to the samples submitted, and the reason why an analysis is desirable or necessary. The carrying out of such analyses is very expensive and persons intrusted with the spending of public funds must be careful that such funds shall not be wasted. Samples submitted for examinations should as far as possible be in the original container and unopened. To carry on the work of this department there is a force of one chemist (Milk Inspector) and a Collector of Samples.

During the year of 1920 the milk delivered in Lowell came from four States of New England, Maine, New

Hampshire, Vermont and Massachusetts. In these four States it came from twenty-four cities and towns.

From Maine there was shipped to Lowell daily 3400 quarts of milk, 1500 quarts of cream, 1275 quarts of buttermilk, and 1700 quarts of skimmed milk. This milk came from a milk depot located at Auburn, and was part of the milk collected from several hundred dairies located in Maine.

From New Hampshire there was shipped to Lowell daily 5976 quarts of milk, 300 quarts of cream, and 40 quarts of skimmed milk. Pelham supplies 3468 quarts from 35 dairies; Hudson supplied 986 quarts from 19 dairies; South Nashua supplied 332 quarts from 6 dairies; Orford supplied 1105 quarts from a milk depot representing numerous dairies in that locality; Milford supplied 85 quarts of milk, 300 quarts of cream, and 40 quarts of skimmed milk from a milk depot representing numerous dairies in that locality. The milk from the two milk depots at Orford and Milton usually comes to Lowell by train, while the milk from the 60 dairies located in Pelham, Hudson and South Nashua comes by truck or wagon.

From Vermont there was shipped to Lowell daily 707 quarts of milk, 900 quarts of cream, and 75 quarts of buttermilk. A milk depot representing numerous dairies at Fairlee supplied 680 quarts of milk, a milk depot at St. Johnsbury, representing numerous dairies, supplied 17 quarts of milk, and 600 quarts of cream; a milk depot at Orleans, representing numerous dairies, supplied 10 quarts of milk and 75 quarts of buttermilk; a milk depot at Morrisville, representing numerous dairies, supplied 300 quarts of cream. All the milk from Vermont comes to Lowell by train.

From Massachusetts there was shipped to Lowell daily 26290 quarts of milk and 34 quarts of cream, supplied by 347 dairies. Dracut supplied 7191 quarts of

milk from 78 dairies; Chelmsford supplied 5334 quarts from 92 dairies; Tewksbury supplied 2236 quarts from 17 dairies; Westford supplied 2823 quarts from 37 dairies; Dunstable supplied 1794 quarts from 33 dairies; Tyngsboro supplied 1674 quarts from 26 dairies; Billerica supplied 1369 quarts from 17 dairies; West Andover supplied 1114 quarts from 10 dairies; Lowell supplied 1097 quarts from 11 dairies; Carlisle supplied 910 quarts from 15 dairies; North Sudbury supplied 544 quarts from 7 dairies; Pepperell supplied 102 quarts from 2 dairies; North Acton supplied 85 quarts from one dairy; and Concord supplied 17 quarts from one dairy. The milk shipped from Concord, North Acton, North Sudbury, and part of the milk from Carlisle is delivered to Lowell by train. The remainder of the milk shipped to Lowell from Massachusetts comes by wagon or truck.

It is estimated that about 1000 quarts of milk is produced and consumed in Lowell daily, of which this department knows nothing, and about 200 quarts are received from adjacent towns, of which there is no record.

As a summary it may be said that the milk consumed in Lowell in 1920 came from four States, from twenty-four cities and towns, from seven milk depots and 407 dairy farms, supplying 37573 quarts of milk, 2734 quarts of cream, 1740 quarts of skimmed milk, and 1350 quarts of buttermilk daily.

PASTEURIZED MILK

There were 79 licensed milk dealers in the city of Lowell in 1920, and of this number 10 milk dealers were delivering a pasteurized product to their wholesale and retail trade. Of the 37,573 quarts of milk delivered daily, 11,500 quarts were sold at wholesale and 26,073 quarts at retail. Of the wholesale milk, 7276 quarts were sold raw, and 4224 quarts were sold as pasteurized

milk. Of the retail milk, 17,446 quarts were sold raw, and 8627 quarts were sold as pasteurized milk. Wholesale and retail there were sold 24,722 quarts of raw milk and 12,851 quarts of pasteurized milk daily. Three local milk plants installed pasteurizing apparatus during the year.

Of the milk that is sold as pasteurized in Lowell, daily, we get from Vermont 102 quarts of milk, 40 quarts of skimmed milk, and 900 quarts of cream; Maine 3400 quarts of milk, 1700 quarts of skimmed milk, and 1500 quarts of cream; New Hampshire 300 quarts of cream. This milk is pasteurized at milk depots, shipped to Lowell and bottled at local plants. There are received from Vermont and New Hampshire by train 2337 quarts of raw milk daily, which is pasteurized in local plants. There are received by wagon and truck in Lowell daily 7012 quarts of milk that are pasteurized in local plants. There are at present seven local plants that pasteurize their milk, and three that receive their milk pasteurized.

Chapter 259 of the General Acts of 1917 defines pasteurized milk for Massachusetts as follows:—

“An Act Defining Pasteurized Milk and Regulating the Sale Thereof. Be it enacted, etc., as follows:

Section 1. Pasteurized milk is hereby defined to be natural cow's milk not more than seventy-two hours old when pasteurized, subjected for a period of not less than thirty minutes, to a temperature not less than one hundred and forty degrees, nor more than one hundred and forty-five degrees Fahrenheit, and immediately thereafter cooled therefrom to a temperature of fifty degrees, Fahrenheit or lower.

Section 2. It shall be unlawful to sell, exchange or deliver, or to advertise, represent, or describe, or to offer or expose for sale or to have in possession with intent to sell as pasteurized milk, milk not pasteurized in conformity with the provisions of this act.

Section 3. Any violation of this act shall be punished by a fine of not less than ten dollars for a first offence, and of not more than one hundred dollars for any subsequent offence.

Section 4. This act shall take effect on the first day of January in the year nineteen hundred and eighteen. (Approved May 16, 1917.)

Since 34.2% of the milk sold in Lowell in 1920 was sold as pasteurized milk, the Milk Inspector would suggest that the Board of Health pass regulations providing for the protection of the public health by defining and regulating pasteurization of Milk and Cream for the City of Lowell. Among some of the regulations that might be considered for pasteurizing plants are:

All washed bottles must be stored in an inverted position until filled, and must be so protected as to prevent contamination.

Surface coolers must be provided with suitable metal covers, unless located in a room used for no other purposes.

Caps of bottles must be stored and kept in such a manner as to be protected from contamination until used.

Clean, washable, outer garments shall be provided and worn by employees while handling milk.

No milk or cream shall be pasteurized a second time.

Milk bottle caps shall be purchased in sterile tubes and the capping of bottles shall be done by machine.

Every pasteurized apparatus must be equipped with an automatic temperature recording device which will indicate the temperature to which the milk or cream has been heated, the temperature at which said heating has been performed, and if possible, the length of time for which the milk or cream is held at required temperature; where a continuous holder is used, the temperature recording thermometer must be attached to the highest

point of the outlet pipe. The temperature records must be made daily and delivered to the Milk Inspector on every Monday for the preceding week's work.

No person shall be employed in any pasteurization plant without first producing to the employer a certificate of good health, signed by a reputable physician.

The Monthly Averages for Total Solids and Butterfats were as follows:

	Total Solids	Fat
January	12.55%	3.76%
February	12.55	3.83
March	12.33	3.64
April	12.30	3.64
May	12.34	3.69
June	12.24	3.56
July	12.18	3.64
August	12.07	3.58
September	12.30	3.60
October	12.45	3.76
November	12.62	3.77
December	12.68	3.80
The legal Standard for Massachusetts is.....	12.00%	3.35%

During the fiscal year ending Dec. 31, 1920, the department spent for milk inspection work \$3722.99. If the population of Lowell is 112,759, the per capita cost for milk inspection for the year was three and three-tenths cents. A conservative compilation made in 1920 shows that the per capita consumption of fluid milk in Lowell daily is 10.66 fluid ounces. Due to the lack of necessary data it was impossible to deduct the amount of milk used in the manufacture of food products.

In spite of unsettled conditions, especially the scarcity of farm labor, many improvements have been made upon the methods used at dairies during the past year. The results are very evident in the bacterial, sedi-

ment and chemical examinations of our milk supply. Each year presents new problems in the selection of dairies, due to the increasing scarcity of milk. Officials who exercise supervision over milk production and handling, are obliged to combine firmness and tact in securing sanitary correction, and at the same time encourage an increase in dairy production. The milk distributing plants supplying Lowell with milk are in far better condition in constructing equipment, and methods, than they ever were before. To be sure there are some milk plants still that need improvements, but it is expected that May 1st, 1921, will find them complying with all the rules and regulations of the Board of Health, or they will be denied a license to sell milk in Lowell. One of the hardest problems that this department has to solve is how to handle the man who produces less than twenty quarts of milk per day, and desires to retail it in the city.

With a decrease in available dairy herds, it has been, and will continue to be, necessary to go farther for our milk supply. This will require longer and more frequent absences from the city in selecting and supervising contributing dairies. It has been found necessary to increase our market milk supply from large dairy districts of New Hampshire and Northern Vermont. This supply compares very favorably chemically and commercially with the milk supplied locally, but the proper supervision over its production is becoming a rather serious problem. In order to keep our supply up to the standard, some additional assistance must be furnished this department at an early date. The work of this department has increased four-fold in the past twelve years, but the number of workers has remained the same for twenty-two years or more. The amount of money appropriated for conducting the affairs of the department, exclusive of salaries, is practically the same as twelve years ago. There is an urgent need of a room being provided where

milk bacterial work can be carried on, the chemical laboratory being unsuitable for that purpose.

I must at this time make cognizance of the wonderful help, co-operation and inspiration of Mr. Francis O'Hare, Agent of the Board of Health, and the kindly, co-operative, instructive and judicious advice received from Dr. Brunelle, Dr. Carroll and Hon. J. E. Drury, members of the Board of Health.

Respectfully submitted,

MELVIN F. MASTER, B. S.,

Inspector of Milk and Vinegar.

REPORT OF THE ATTENDING PHYSICIAN
GENITO-URINARY CLINIC

LOWELL, MASS., JAN. 1, 1921.

*Board of Health,
Lowell, Mass.*

GENTLEMEN:—

The Genito-Urinary Clinic of the Health Department had sixty-one cases under observation and treatment Dec. 31, 1919, and from that date to Dec. 31, 1920. admitted three hundred and sixty-six cases and discharged two hundred and thirty-one classified as follows:—

TABLE OF ADMISSIONS AND DISCHARGES

	Sex	Syphilis	Gonorrhoea	Chancroid	Condylomata Accuminate	Pediculosis Pubis	No Venereal Disease	Total Number of Diseases
Cases transferred from 1919..	Male	18	18	0	0	0	1	37
	Female	17	7	0	0	0	0	24
	Total	35	25	0	0	0	1	61
Cases admitted during 1920..	Male	87	111	4	2	1	33	238
	Female	46	53	1	3	3	22	128
	Total	133	164	5	5	4	55	366
Cases treated during 1920...	Male	105	129	4	2	1	34	275
	Female	63	60	1	3	3	22	152
	Total	168	189	5	5	4	56	427
Cases discharged during 1920 with permission as cured.	Male	1	11	1	2	1	28	44
	Female	2	3	1	2	3	27	38
	Total	3	14	2	4	4	55	82
As probably cured.....	Male	2	23	0	0	0	0	25
	Female	2	3	0	0	0	0	5
	Total	4	26	0	0	0	0	30
As non-infectious but not cured	Male	2	4	0	0	0	0	6
	Female	3	1	0	0	0	0	4
	Total	5	5	0	0	0	0	10
To private physicians and hospitals	Male	15	23	0	0	0	0	38
	Female	11	15	0	0	0	0	26
	Total	26	38	0	0	0	0	64
Without permission	Male	15	19	0	0	0	0	34
	Female	8	3	0	0	0	0	11
	Total	23	22	0	0	0	0	45
Total diseases discharged 1920	Male	35	80	1	2	1	28	147
	Female	26	25	1	2	3	27	84
	Total	61	105	2	4	4	55	231
Cases under treatment Dec. 31, 1920		107	84	3	1	0	1	196

Cases of double infection: Male, 11; Female, 10; Total, 21.

The following were classified as the source of admission of the cases where such information could be obtained:—

Sex	1919 Transfers	Private Physicians, Nurses, Social Workers	Hospitals	City Charity Dispensary	Court and Policewomen	Other Patients	Placards	Unknown Sources	Totals
Male	37	37	20	12	2	27	43	97	275
Female	24	23	14	17	13	110	6	45	152
Total	61	60	34	29	15	137	49	142	427

Laboratory Examinations were made as follows:—

	Sex	Positive	Negative	Doubtful	Total	Grand Total
Syphilis:						
Dark Field Examinations for <i>Treponema Pal-</i> <i>lida</i>	Male	0	6	1	7	
	Female	0	1	0	1	
	Total	0	7	1	8	
(Dark Field not available until Nov., 1920) Wasserman Blood Tests for diagnosis and treatment control	Male	90	180	24	294	
	Female	46	115	25	186	
	Total	136	295	49	480	
Spinal fluid examinations					121	
Total syphilitic examina- tions					609	
Gonorrhœa:						
Gonococci fixation tests for diagnosis and treatment control....	Male	95	115	20	230	
	Female	45	65	20	130	
	Total	140	180	40	360	
Gonococci smear exami- nations					739	
Total gonococci examina- tions					1099	
Total laboratory proced- ures						1708

Treatments administered were classified under the following heads:—

No Venereal Disease:

Examinations 56

Syphilis:

Arsphenamine 757

Mercury 813

Lumbar Puncture 121

Gonorrhœa:

Male:

Injections and irrigations..... 907

Sounds passed 224

Prostatic massage 75

Meototomy 7

Female:

Vaginal treatments 460

Excision Bartholinian gland..... 4

Condylomata acuminata, removal of..... 5

Total Treatments 3429

Total therapeutic procedures (treatment plus laboratory examinations) 5137

Money collected from patients.....\$704.20

Patients remaining under treatment and observation Dec. 31st, 1920 196

SUMMARY:

Sixty-one cases were transferred from 1919, and three hundred and sixty-six new cases admitted, making a total of four hundred and twenty-seven cases under treatment during 1920. Two hundred and thirty-one patients were discharged during 1920, leaving one hundred and ninety-six cases under treatment at the end of the year. This shows an increase in the Clinic of over 300%; this increase has been handled without additional personnel and with the removal of a much-needed clerk by the Civil Service Commissioners.

Sources of admission show the greatest number sent in by the Physicians of Lowell with the response to the placards in public places being classed second. Hospi-

tals, City Charity Dispensary and other patients referred about the same proportion of cases.

One hundred and twelve cases were discharged as cured or probably cured, ten as non-infectious but not cured, and sixty-four to private physicians (usually those referring patient to clinic) and institutions. Forty-five patients left the Clinic without permission in an infectious condition.

The Clinic is greatly handicapped by lack of room and limited personnel, and the lack of a Social Service follow-up department. Forty-five cases left the Clinic as potential sources of infection to probably many times the number of innocent persons. Many of the families of patients under treatment contain infectious members not under treatment, retarding the cure of the Clinic patient and infecting others, which we are unable to reach through lack of a Social Worker.

Respectfully submitted,

HAROLD L. LELAND, M. D.,

Attending Physician Genito-Urinary Clinic.

REPORT OF EXAMINING PHYSICIAN FOR THE TUBERCULOSIS CLINIC

LOWELL, MASS., JAN. 1, 1921.

*To the Members of the Board of Health,
Lowell, Mass.*

I have the honor to submit a report of the work done by me as Examining Physician from Jan. 1, to Dec. 31, 1920:—

Number of cases examined	528
New cases	236
Old cases	292
Incipient cases	34
Moderately advanced cases.....	45
Advanced cases	50
Exposed cases	92
Arrested cases	7
Other forms	8
Non-tubercular cases	332
Number of cases that have moved out of town.....	28

Yours respectfully,

JOHN N. DRURY, M. D.

Examining Physician.

REPORT OF TUBERCULOSIS NURSE

LOWELL, MASS., JAN. 1, 1921

*Board of Health,
Lowell, Mass.*

GENTLEMEN:—

Following is the work done by me from Jan. 1, 1920, to Dec. 31, 1920, as Tuberculosis Nurse for the Health Department:—

Number of cases examined.....	528
New cases	236
Old cases	292
Incipient cases	34
Moderately advanced cases.....	45
Advanced cases	50
Exposed cases	92
Arrested cases	7
Other forms	8
Non-tubercular cases	332
Number of cases that have moved out of town.....	28
Number of private doctors' cases under supervision.....	85
Number of cases at the following Sanatoria:	
Boston Consumptives' Hospital.....	1
Cambridge Tuberculosis Hospital.....	1
Chelmsford Street Hospital.....	6
Lowell Isolation Hospital.....	31
Lawrence Tuberculosis Hospital.....	15
Lakeville State Sanatorium.....	14
North Reading State Sanatorium.....	19
Rutland State Sanatorium.....	14
Tewksbury State Infirmary.....	26
Westfield State Sanatorium.....	12
United States Public Health Hospitals:	
Groton	8
Glen Rock	1
Camp Meade	1
New Haven	3
Oxford Springs	3
Parker Hill	1

BOARD OF HEALTH.

27

Number of deaths in 1920 from Tuberculosis.....	111
Number of deaths from Pulmonary Tuberculosis.....	77
Number of deaths from other forms of Tuberculosis.....	34
Number of deaths (under supervision).....	83
Number of deaths (not under supervision).....	28
Number of visits made during the year.....	2486

I also assisted at the Genito-Urinary Clinic twice a week.

Respectfully submitted,

BERTHA M. KIRWIN, R. N.,
Tuberculosis Nurse.

REPORT OF CHILD WELFARE NURSE

LOWELL, MASS., JAN. 1, 1921.

*Board of Health,
Lowell, Mass.*

GENTLEMEN :—

Following is a report of the visits made by me from Jan. 1, 1920, to Dec. 31, 1920:—

Number of postnatal visits.....	1022
Number of postnatal revisits.....	1125
Total number of postnatal visits.....	2147
Number of new Ophthalmia Neonatorum cases.....	18
Number of revisits	103
Number of Weak Eyes.....	25
Deaths—Premature birth	18
Under 1 week.....	23
Over 1 week.....	97
	138
Trachoma cases	1
Vaginitis cases	1
Contagious Disease cases.....	2
Tuberculosis cases	3
Referred to Police Women.....	1
Referred to Lowell Guild.....	71

I also assisted at the Tuberculosis Clinic and the Genito-Urinary Clinic.

Respectfully submitted,

LOIS A. TITCOMB, R. N.,
Child Welfare Nurse.

REPORT OF CHILD WELFARE NURSE

LOWELL, MASS., JAN. 1, 1921.

*Board of Health,
Lowell, Mass.*

GENTLEMEN:—

Following is a report of the visits made by me from
Jan. 1, 1920, to Dec. 31, 1920:—

Number of postnatal visits.....	674
Number of postnatal revisits.....	1230
Total number of postnatal visits.....	1904
Number of new Ophthalmia Neonatorum cases.....	15
Number of revisits Ophthalmia Neonatorum cases....	126
<hr/>	
Total	141
Weak Eyes	8
Revisits	6
Deaths	66
Still births	9
Trachoma cases	3
Contagious diseases	13
Conjunctivitis cases	1
Revisits	10
Cases referred to G. U. Clinic.....	2
Cases referred to Tuberculosis Clinic.....	1
Cases referred to Lowell Guild.....	6

I also assisted at the Genito-Urinary Clinic one evening each week alternately.

Respectfully submitted,

HELEN V. TOMPKINS, R. N.,
Child Welfare Nurse.

Notices to abate the following nuisances were sent from this office during the year 1920:—

Clogged sink waste pipes.....	4
Clogged drains	19
Clogged water closets	6
Clogged catch basins.....	5
Leaky sink waste pipes.....	17
Leaky water supply pipes.....	9
Leaky water closet tanks.....	4
Leaky water closets.....	11
Leaky roofs	3
Untrapped sinks	3
Untrapped refrigerators	2
Untrapped bar drainers.....	1
Open back vent pipe connections.....	2
Hens removed	6
Pigs removed	38
Pigeons removed	1
Rubbish in yards.....	124
Rubbish in cellars.....	25
No water supply to tenements.....	9
No water supply to water closets.....	24
No water supply to sinks.....	3
Ceilings whitewashed	6
Plaster off ceilings.....	13
Dilapidated woodwork around toilets.....	4
Dilapidated woodwork around sinks.....	2
Open drains	17
Insufficient water supply to water closets.....	7
Filthy water closet compartments.....	1
Contents of dry wells overflowing.....	4
Filth stables	1
No cover on sink traps.....	2
No cover on house traps.....	1
Defective joints in sink waste pipes.....	5
Frozen water supply pipes.....	1
Defective chimney flue.....	1
Water in cellar.....	2
Manure in yard.....	3
Decayed meat and vegetables.....	1
Broken and leaky water closet bowls.....	8

Dilapidated water closets.....	8
Vaults cleaned	2
Dirty tenements	1
Permission granted to remove contents of privy vaults..	6
Permission granted to remove contents of dry wells....	2

There were 2539 vaccinations during the year.

REPORT OF PLUMBING INSPECTORS

LOWELL, MASS., JAN. 1, 1921.

*Board of Health,
Lowell, Mass.*

GENTLEMEN:—

The following is a report of the plumbing work done for the year ending Dec. 31, 1920:—

Whole number of applications for permits to do plumbing...	1,022
New houses	158
Old Houses	864
	— 1,022
Total visits	5,365
Inspections	3,832
Tests	1,533
	— 5,365

One prosecution for doing plumbing without permit.

Respectfully submitted,

CHARLES N. MIDWOOD,

WILLIAM I. RYAN,

Plumbing Inspectors.

REPORT OF FUMIGATOR

 LOWELL, MASS., JAN. 1, 1921.

*Board of Health,
Lowell, Mass.*

GENTLEMEN:—

Following is a report of the fumigating work done by me during the year 1920:—

Houses	572
Rooms	1,143
Tuberculosis cases	96
Infantile paralysis cases.....	13
Cerebro-spinal meningitis cases.....	8
Cancer cases	5
Smallpox case	1
Leprosy case	1

Respectfully submitted,

SPENCER D. BROWN,

Fumigator.

REPORT OF INSPECTOR OF MEATS AND PROVISIONS

LOWELL, MASS., JAN. 1, 1921.

*Board of Health,
Lowell, Mass.*

GENTLEMEN :—

The following is a report of the work done by me during the year 1920 :—

Number of inspections made of stores.....	3,139
Number of turkeys and fowl condemned as unfit for food.....	4
Number of pounds of lamb condemned as unfit for food.....	32
Number of pounds of beef condemned as unfit for food.....	62
Number of pounds of sausage condemned as unfit for food....	9
Also one-half hog, three barrels pickled hogs' heads, two barrels of pickled hogs' ears, one barrel of pickles	
Number of swine inspected at time of slaughter.....	181

Respectfully submitted,

C. A. HAMBLET,

M. D. V.

CASES OF CONTAGIOUS DISEASES REPORTED

	1920	1919	1918	1917
Diphtheria	254	234	186	438
Scarlet Fever	221	327	99	77
Measles	1,376	168	501	360
Typhoid Fever	27	31	21	37
Smallpox	1	1	2	1
Cerebro-spinal Meningitis	11	8	19	17
Infantile Paralysis	14	8	7	9
Tuberculosis	268	288	256	244
Influenza	1,236	1,004	7,394	0

DEATHS FROM CONTAGIOUS DISEASES

	1920	1919	1918	1917
Diphtheria	20	23	17	24
Scarlet Fever	1	6	4	3
Measles	26	4	8	4
Typhoid Fever	3	4	2	7
Smallpox	0	0	0	0
Cerebro-spinal Meningitis	6	6	9	10
Infantile Paralysis	5	3	5	2
Tuberculosis	111	143	182	177
Influenza	21	27	164	3

CASES OF DIPHTHERIA REPORTED TO THE
BOARD OF HEALTH, 1920

	Cases Reported	Deaths
January	50	7
February	14	2
March	20	0
April	9	1
May	9	2
June	7	1
July	1	0
August	9	1
Sept.	9	2
October	36	3
November	39	0
December	51	1
	<hr/> 254	<hr/> 20

Mortality of diphtheria, 7.9 per cent.

MORTALITY OF DIPHTHERIA

Antitoxin Treatment	1894	.....	33.0 per cent.
	1895	.....	44.0
	1896	.....	43.0
	1897	.....	23.0
	1898	.....	23.0
	1899	.....	18.0
	1900	.....	10.0
	1901	.....	12.0
	1902	.....	9.5
	1903	.....	10.5
	1904	.....	11.0
	1905	.....	6.0
	1906	.....	9.0
	1907	.....	7.5
	1908	.....	7.0
	1909	.....	12.5
	1910	.....	9.2
	1911	.....	9.7
	1912	.....	10.4
	1913	.....	9.9
	1914	.....	16.3
	1915	.....	10.6
	1916	.....	13.3
	1917	.....	5.5
	1918	.....	9.1
	1919	.....	9.8
	1920	.....	7.9

SCARLET FEVER

	1920	1919	1918
Cases reported	221	327	99
Deaths reported	1	6	4
Per cent. total cases.....	0.4	1.8	4.0

	Cases Reported	Deaths
January	60	0
February	20	1
March	10	0
April	12	0
May	19	0
June	13	0
July	5	0
August	8	0
September	6	0
October	26	0
November	24	0
December	18	0
	<hr/> 221	<hr/> 1

MEASLES

	Cases Reported	Deaths
January	6	0
February	9	0
March	4	0
April	7	0
May	55	1
June	168	2
July	149	1
August	71	3
September	45	2
October	173	5
November	331	3
December	358	9
	<hr/> 1,376	<hr/> 26

INFANTILE PARALYSIS

	Cases Reported	Deaths
January	0	0
February	1	1
March	0	0
April	0	0
May	0	0
June	1	0
July	0	0
August	1	0
September	3	0
October	7	4
November	0	0
December	1	0
	<hr/>	<hr/>
	14	5

CEREBRO-SPINAL MENINGITIS

	Cases Reported	Deaths
January	4	3
February	0	0
March	3	1
April	0	0
May	0	0
June	0	0
July	2	0
August	0	1
September	1	1
October	0	0
November	1	0
December	0	0
	<hr/>	<hr/>
	11	6

TUBERCULOSIS

	Cases Reported	Deaths
January	25	4
February	11	17
March	17	14
April	18	13
May	21	9
June	28	8
July	19	11
August	27	7
September	17	3
October	32	7
November	26	6
December	27	12
	<hr/>	<hr/>
	268	111

TYPHOID FEVER

	Cases Reported	Deaths
January	1	0
February	2	0
March	1	0
April	1	0
May	0	0
June	4	0
July	6	2
August	1	1
September	5	0
October	4	0
November	1	0
December	1	0
	<hr/>	<hr/>
	27	3

TYPHOID FEVER.

	Population	Cases Reported	Deaths
Total 1920	112,759	27	3
Total 1919	107,978	31	4
Total 1918	107,978	21	2
Total 1917	107,978	37	7
Total 1916	107,978	61	13
Total 1915	106,294	112	18
Total 1914	106,294	85	11
Total 1913	106,294	65	11
Total 1912	106,294	86	10
Total 1911	106,294	61	7
Total 1910	106,294	186	22
Total 1909	96,380	91	11
Total 1908	96,380	188	24
Total 1907	96,380	73	9
Total 1906	96,380	30	7
Total 1905	94,889	56	17
Total 1904	104,402	48	17
Total 1903	101,959	238	26
Total 1902	99,574	83	16
Total 1901	94,969	70	18
Total 1900	94,969	85	17
Total 1899	90,114	57	17
Total 1898	87,000	119	24
Total 1897	87,000	105	18
Total 1896	95,700	178	36
Total 1895	84,359	172	33
Total 1894	83,026	282	50
Total 1893	81,694	160	53
Total 1892	80,361	373	75
Total 1891	79,029	293	77
Total 1890	77,696	454	123

A decrease from 1.59 per thousand inhabitants to .02 in thirty-one years.

VITAL STATISTICS

	1920	1919	1918
Deaths, male	893	828	1,272
Deaths, female	877	881	1,201
	<hr/>	<hr/>	<hr/>
	1,770	1,709	2,473
Children under 1 year.....	426	377	525
Children under 2 years.....	531	435	684
Children under 5 years.....	587	515	797
Per cent. of total deaths under 5 years	33.2	30.0	32.0

BIRTHPLACES

	Of Deceased	Of Parents
Lowell	815	326
Massachusetts	125	210
Other States	255	511
Ireland	187	702
Canada	201	696
Great Britain	85	234
Other Countries	94	670
Unknown	8	191
	<hr/>	<hr/>
	1,770	3,540

PLACES OF INTERMENT

St. Patrick's Cemetery.....	706
Edson	266
Westlawn	150
Lowell	64
St. Joseph's	398
St. Peter's	2
Other Cemeteries	9
Removed from City.....	175
	<hr/>
	1,770

PLACES OF DEATH

Ward 1	116
Ward 2	193
Ward 3	167
Ward 4	111
Ward 5	106
Ward 6	283
Ward 7	148
Ward 8	155
Ward 9	109
Chelmsford Street Hospital.....	90
Lowell Hospital	84
Lowell General Hospital.....	101
St. John's Hospital	87
Shaw Hospital	2
Cottage Hospital	4
Tuberculosis Hospital	2
Cheney-Allard Hospital	5
Mrs. Garrett's Hospital.....	7
	<hr/>
	1,770

DEATH RATE

Population, census	1890	77,696	1,959	25.21
estimated	1891	79,029	1,972	24.95
estimated	1892	80,361	2,224	27.67
estimated	1893	81,694	2,094	25.62
estimated	1894	83,026	1,775	21.28
census	1895	84,359	1,857	22.01
estimated	1896	85,700	1,901	22.18
estimated	1897	87,000	1,855	21.33
estimated	1898	87,000	1,808	20.78
estimated	1899	90,114	1,848	20.50
census	1900	94,969	1,849	19.47
estimated	1901	94,969	2,038	21.45
estimated	1902	99,574	1,935	19.43
estimated	1903	101,959	1,898	18.61
estimated	1904	104,402	1,736	16.61
census	1905	94,889	1,899	20.02
census	1906	96,380	1,918	19.90
census	1907	96,380	2,063	21.40
census	1908	96,380	1,963	20.36
census	1909	96,380	1,885	19.55
census	1910	106,294	2,100	19.76
census	1911	106,294	1,925	18.11
census	1912	106,294	1,891	17.79
census	1913	106,294	1,749	16.45
census	1914	106,294	1,768	16.63
census	1915	106,294	1,820	17.12
census	1916	107,978	1,964	18.19
census	1917	107,978	1,938	17.95
census	1918	107,978	2,473	22.90
census	1919	107,978	1,709	15.82
census	1920	112,759	1,770	15.69

[illegible]

CAUSES OF DEATH	Total for 1920	AGE																	SEX									
																			Males	Females								
		Under 1 year	1 year and under 2 years	2 years and under 3 years	3 years and under 4 years	4 years and under 5 years	Total under 5 years	5 years and under 10 years	10 years and under 15 years	15 years and under 20 years	20 years and under 25 years	25 years and under 30 years	30 years and under 35 years	35 years and under 40 years	40 years and under 45 years	45 years and under 50 years	50 years and under 55 years	55 years and under 60 years	60 years and under 65 years	65 years and under 70 years	70 years and under 75 years	75 years and under 80 years	80 years and under 85 years	85 years and under 90 years	90 years and over			
General Diseases—Continued																												
28. Tuberculosis of the lungs.	76	1	1	...	...	1	2	...	2	4	5	16	11	8	6	9	5	4	2	2	...	...	...	...	...	40	36
29. Acute millary tuberculosis	4	...	1	...	...	...	1	...	...	...	1	...	...	1	1	...	...	...	...	...	...	...	...	...	...	3	1
30. Tuberculous meningitis ..	23	8	4	2	...	1	15	4	4	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	13	10
31. Abdominal tuberculosis ..	3	...	...	...	...	...	...	...	...	1	1	...	...	...	...	...	...	...	...	1	...	...	...	...	...	1	2
32. Pott's disease	1	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1
33. White swellings .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
34. Tuberculosis of other organs	4	...	...	...	...	...	...	...	...	...	1	...	...	1	1	...	1	...	...	...	...	...	...	...	...	4	...
35. Disseminated tuberculosis.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
36. Rickets	2	2	...	...	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2
37. Syphilis .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
38. Gonococcus infection .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
39. Cancer and other malignant tumors of the buccal cavity	6	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	1	1	2	1	...	...	...	6
40. Cancer and other malignant tumors of the stomach and liver	29	3	4	1	3	2	9	3	4	14	15

CAUSES OF DEATH	Total for 1920	AGE																	SEX							
																			Males	Females						
		Under 1 year	1 year and under 2 years	2 years and under 3 years	3 years and under 4 years	4 years and under 5 years	Total under 5 years	5 years and under 10 years	10 years and under 15 years	15 years and under 20 years	20 years and under 25 years	25 years and under 30 years	30 years and under 35 years	35 years and under 40 years	40 years and under 45 years	45 years and under 50 years	50 years and under 55 years	55 years and under 60 years	60 years and under 65 years	65 years and under 70 years	70 years and under 75 years	75 years and under 80 years	80 years and under 85 years	85 years and under 90 years	90 years and over	
General Diseases—Continued																										
41. Cancer and other malignant tumors of the peritoneum, intestines and rectum...	13											1	4		1	1	1	2	1	2	1					
42. Cancer and other malignant tumors of the genital organs of the female.....	8															1	2	3	1	1						
43. Cancer and other malignant tumors of the breast...	11											1				2	3			1	1		3			
44. Cancer and other malignant tumors of the skin.....	4																1	1		1	1					
45. Cancer and other malignant tumors of organs not specified	21															1	4	5	1	6	3			1		
46. Other tumors (tumors of the female genital organs excepted)																										
47. Rheumatism, acute, articular																										
48. Rheumatism, chronic and gout	1																			1						
49. Scurvy																										
50. Diabetes	11								2								1	3	3	1		1				

[illegible]

[illegible]

CAUSES OF DEATH	Total for 1921	AGE																	SEX								
		AGE																	Males	Females							
		Under 1 year	1 year and under 2 years	2 years and under 3 years	3 years and under 4 years	4 years and under 5 years	Total under 5 years	5 years and under 10 years	10 years and under 15 years	15 years and under 20 years	20 years and under 25 years	25 years and under 30 years	30 years and under 35 years	35 years and under 40 years	40 years and under 45 years	45 years and under 50 years	50 years and under 55 years	55 years and under 60 years	60 years and under 65 years	65 years and under 70 years	70 years and under 75 years	75 years and under 80 years	80 years and under 85 years	85 years and under 90 years	90 years and over		
Diseases of the Nervous System and of the Organs of Special Sense—Continued																											
70. Convulsions (non-puerperal 5 years and over)...	2	...	...	...	...	...	...	1	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1
71. Convulsions of infants (under 5 years of age)....	15	11	3	1	...	15	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	10	5
72. Chorea .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
73. Neuralgia and neuritis...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
74. Other affections of the nervous system	2	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	1	...	...	...	...	2
75. Diseases of the eye and their annexa .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
76. Diseases of the ears....	2	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	1	...	...	...	...	2
Total of the nervous system, etc.	157	16	6	3	1	1	27	3	4	2	4	1	1	3	5	7	13	14	19	18	18	8	5	5	...	67	90
III. Diseases of the Circulatory Apparatus																											
77. Pericarditis	3	1	1	1	1	2
78. Endocarditis, acute	74	1	...	1	...	4	2	3	...	1	1	3	2	3	6	6	12	11	5	3	2	2	2	37	37

[illegible]

CAUSES OF DEATH	Total for 1920																								SEX
	AGE																								
	Under 1 year	1 year and under 2 years	2 years and under 3 years	3 years and under 4 years	4 years and under 5 years	Total under 5 years	5 years and under 10 years	10 years and under 15 years	15 years and under 20 years	20 years and under 25 years	25 years and under 30 years	30 years and under 35 years	35 years and under 40 years	40 years and under 45 years	45 years and under 50 years	50 years and under 55 years	55 years and under 60 years	60 years and under 65 years	65 years and under 70 years	70 years and under 75 years	75 years and under 80 years	80 years and under 85 years	85 years and under 90 years	90 years and over	
Diseases of the Respiratory Apparatus—Concluded																									
87. Affections of the larynx.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
88. Affections of the thyroid body.....	1	.....	.....	.....	.....	35	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	1	.....	.....	.....	.....	.....	.....	.....
89. Bronchitis, acute.....	40	25	8	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
90. Bronchitis, chronic.....	12	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
91. Broncho pneumonia.....	174	55	40	6	2	3106	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
92. Pneumonia.....	90	1	5	2	1	.....	9	3	.....	1	.....	12	10	8	5	8	5	11	5	3	6	1	2	1	.....
93. Pleurisy.....	8	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
94. Pulmonary congestion and pulmonary apoplexy.....	10	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
95. Gangrene of the lung.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
96. Asthma.....	4	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
97. Emphysema, pulmonary.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
98. Other diseases of the respiratory apparatus (phthisis excepted).....	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total respiratory apparatus.....	344	83	53	10	4	3153	9	2	2	2	16	18	15	8	16	15	18	13	10	15	6	12	7	2	178166

CAUSES OF DEATH		Total for 1920		AGE																				SEX			
																								Males	Females		
				Under 1 year	1 year and under 2 years	2 years and under 3 years	3 years and under 4 years	4 years and under 5 years	Total under 5 years	5 years and under 10 years	10 years and under 15 years	15 years and under 20 years	20 years and under 25 years	25 years and under 30 years	30 years and under 35 years	35 years and under 40 years	40 years and under 45 years	45 years and under 50 years	50 years and under 55 years	55 years and under 60 years	60 years and under 65 years	65 years and under 70 years	70 years and under 75 years	75 years and under 80 years	80 years and under 85 years	85 years and under 90 years	90 years and over
V. Diseases of the Digestive Apparatus																											
99. Affections of the mouth and amexa																											
100. Affections of the pharynx																											
101. Affections of the esophagus																											
102. Ulcer of the stomach	4											1	1	1	1	1			1	1						2	
103. Other affections of the stomach (cancer excepted)	12	3	1			4			1					2		1	2	1	1							9	
104. Diarrhea and enteritis (under 2 years)	135	115	19	1		135																				80	
105. Diarrhea and enteritis (2 years and over)	10		2	2		4	1			1						1	1				2					3	
106. Ankylostomiasis																										7	
107. Parasites, intestinal																											
108. Appendicitis and typhitis	9						1	3		3			2													6	
109. Hernia, intestinal obstruction	21	2		1		3	1		1	2				2		2	1	1	2	2		1	2	1	1	10	

CAUSES OF DEATH	Total for 1920	AGE																				SEX						
																			Males	Females								
		Under 1 year	1 year and under 2 years	2 years and under 3 years	3 years and under 4 years	4 years and under 5 years	Total under 5 years	5 years and under 10 years	10 years and under 15 years	15 years and under 20 years	20 years and under 25 years	25 years and under 30 years	30 years and under 35 years	35 years and under 40 years	40 years and under 45 years	45 years and under 50 years	50 years and under 55 years	55 years and under 60 years			60 years and under 65 years	65 years and under 70 years	70 years and under 75 years	75 years and under 80 years	80 years and under 85 years	85 years and under 90 years	90 years and over	
Diseases of the Digestive Apparatus—Continued	2															1		1									2	
110. Other diseases of the intestines																												
111. Acute yellow atrophy of liver																												
112. Hydatid tumor of the liver																												
113. Cirrhosis of the liver.....	9															1	1	3	1				2				5	4
114. Biliary calculi																												
115. Other diseases of the liver	8	1				1									1		3				2		1				3	5
116. Diseases of the spleen....																												
117. Simple peritonitis (non-puerperal)	21	1			1		2	1	3	2	1	3	2	3		1		1			1		1			11	10	
118. Other diseases of the digestive system (cancer and tuberculosis excepted)	2											1				1											1	1
Total digestive apparatus	233	122	19	4	4	...	149	4	3	7	1	10	3	6	4	6	7	10	4	7	5	3	1	2	1	132	101	

Non-Venereal. VI. Diseases of the Genito-Urinary Apparatus and its Annexa

Total for 1920

CAUSES OF DEATH

Total for 1920

CAUSES OF DEATH	AGE																								SEX	
	Under 1 year												AGE												Males	Females
	1 year and under 2 years	2 years and under 3 years	3 years and under 4 years	4 years and under 5 years	Total under 5 years	5 years and under 10 years	10 years and under 15 years	15 years and under 20 years	20 years and under 25 years	25 years and under 30 years	30 years and under 35 years	35 years and under 40 years	40 years and under 45 years	45 years and under 50 years	50 years and under 55 years	55 years and under 60 years	60 years and under 65 years	65 years and under 70 years	70 years and under 75 years	75 years and under 80 years	80 years and under 85 years	85 years and under 90 years	90 years and over			
Diseases of the Genito-Urinary Apparatus and its Adnexa—Continued																										
130. Other diseases of the uterus									1		1															
131. Cysts and other tumors of the ovary																										
132. Salpingitis and other diseases of the female genital organs																										
133. Diseases of the breast, non-puerperal (cancer excepted)																										
Total of genito-urinary	3	1	1		5			4	4	6	7	11	4	15	7	5	6	12	5	3	6					
VII. Puerperal State.																										
134. Accidents of pregnancy																										
135. Hemorrhage, puerperal ..										2	1															
136. Other accidents of labor ..										1																
137. Septicemia, puerperal ...											1															
138. Puerperal albuminuria and convulsions								1	2		2															
	5																									

[illegible]

[illegible]

[illegible]

CAUSES OF DEATH

CAUSES OF DEATH	AGE																								SEX	
																									Males	Females
	Under 1 year	1 year and under 2 years	2 years and under 3 years	3 years and under 4 years	4 years and under 5 years	Total under 5 years	5 years and under 10 years	10 years and under 15 years	15 years and under 20 years	20 years and under 25 years	25 years and under 30 years	30 years and under 35 years	35 years and under 40 years	40 years and under 45 years	45 years and under 50 years	50 years and under 55 years	55 years and under 60 years	60 years and under 65 years	65 years and under 70 years	70 years and under 75 years	75 years and under 80 years	80 years and under 85 years	85 years and under 90 years	90 years and over		
Affections Produced by External Causes—Continued																										
183. Homicide by cutting or piercing instruments . . .	1										1														1	
184. Homicide by other means . . .																										
185. Fractures (cause not specified)	1											1													1	
186. Other external violence . .	2										1		1												2	
Total affections, etc.,	73	2	1	2	5	11	4	6	4	5	6	2	4	6	5	3	5	2	1	1	2	1	1	1	54	
XIV. Ill-Defined Diseases.																										
187. Ill-defined organic cases	1					1																			1	
188. Sudden death																										
189. Cause of death not specified or ill-defined	14	9			9						1			2								2			9	
Total ill-defined diseases	15	10			10						1			2								2			9	
Total from all causes.	1770	426	105	29	17	10,587	42	27	28	32	67	57	65	51	78	99	105	108	113	113	73	69	44	12	893	
Males																										
Females																										

Total for 1920

COLLECTION OF ASHES, 1920

	Loads
January	3,565
February	2,380
March	3,365
April	3,497
May	2,760
June	2,444
July	2,309
August	2,044
September	2,076
October	2,174
November	2,962
December	3,837
	<hr/>
	33,413

COLLECTION OF SWILL, 1920

	Loads
January	356½
February	226
March	308
April	283½
May	274
June	297
July	297
August	378½
September	445
October	365
November	324½
December	295
	<hr/>
	3,850

594 loads of Market Refuse were collected in 1920.

768 loads of Paper were collected in 1920.

SWILL ACCOUNT, 1920

January	\$ 390.64
February	240.02
March	325.02
April	295.63
May	285.04
June	311.28
July	311.29
August	398.12
September	461.27
October	364.39
November	321.25
December	293.76
Swill Licenses	490.00
	<hr/>
	\$4,487.71

652 loads of swill were charged to the City Farm in 1920.

92 Swill Licenses were issued during the year.

FINANCIAL STATEMENT—EXPENDITURES

PAY ROLLS—OFFICE

January	\$ 2,024.72
February	1,649.17
March	1,767.71
April	1,616.88
May	2,034.60
June	1,733.75
July	2,503.46
August	1,766.88
September	1,546.88
October	1,854.20
November	1,467.48
December	1,778.50
	<hr/>
	\$21,744.23

PAY ROLLS—YARD

January	\$ 8,684.90
February	7,611.06
March	8,999.74
April	8,433.51
May	10,494.34
June	8,036.28
July	9,775.62
August	7,693.55
September	7,399.54
October	8,688.72
November	7,450.96
December	9,548.72
	<hr/>
	\$102,816.94

SALARIES OF HEALTH OFFICE, 1920

Agent	\$ 2,306.33
General Inspector	1,872.88
Plumbing Inspectors:	
Garrity	672.75
Midwood	1,805.50
Ryan	890.66
Health Inspector	1,384.74
Fumigator	1,622.87
Nurses	4,939.40
Dr. Leland	1,003.75
Nurse at G. U. Clinic (Male).....	240.00
Registrar	1,269.07
Tuberculosis Examining Physician....	402.68
Vaccinating Physician	402.68
Meat Inspector	1,003.75
Clerk	312.50
Wages during quarantine.....	28.00
Expenses of Cottage Hospital.....	1,454.67
Wages during Smallpox quarantine....	132.00
Salaries of Board.....	2,104.89
Salaries of Bacteriologist.....	1,000.00
	<hr/>
	\$24,849.12

YARD LABOR, 1920

Ashes	\$ 48,073.88
Swill	19,654.21
Dumps and Alleys.....	11,146.51
Stable	6,498.19
Foreman	2,065.15
Blacksmith	3,502.37
Market Refuse	4,943.99
Yardman	1,802.90
Wheelwright	1,391.16
Vacations	3,643.58
Smallpox	95.00
	<hr/>
	\$102,816.94

HEALTH OFFICE SUNDRIES

Alcohol	\$ 61.67	
Alcohol Bond	10.00	
New Auto	1,750.00	
Auto Expenses	259.78	
Advertising	103.45	
Bacteriological Laboratory	195.59	
Books	45.40	
Batteries	4.50	
Clerical Services	242.50	
Culture Tubes	21.33	
Car Tickets	812.00	
Express	48.43	
Fumigating Supplies	214.20	
First Aid Cabinet.....	13.00	
Investigating deaths	59.00	
Printing	425.75	
Printing Annual Report.....	288.00	
Stamped envelopes	145.25	
Steel cases	12.50	
Sundries	232.10	
Traveling expenses	13.37	
Telephone	24.30	
Tetanus Antitoxin	36.00	
Vaccinating	86.00	
Vaccination plasters	8.90	
Tongue Depressors	9.30	
Office supplies and sundries.....		\$ 5,122.32
Children's Hospital, Boston.....	94.51	
Boston, City of.....	22.00	
Cottage Hospital Expenses:		
Medicine	\$ 25.19	
Medical service	146.75	
Provisions	158.47	
Supplies	18.16	748.57
Everett, City of.....	5.65	
Fitchburg	40.00	
Infantile Paralysis Clinic.....	140.86	
Limousine	2.00	
Medicine	19.85	
Medical and Surgical supplies.....	26.05	

BOARD OF HEALTH.

67

Medical services	276.00	
Tewksbury Infirmary	266.00	
Smallpox Expenses:		
Fuel	8.00	
Medical services	40.00	
Provisions	28.46	
Sundries	5.22	
Vaccination at homes.....	38.00	
Telephone	63.00	182.68
Other contagious diseases.....		<hr/> \$ 1,824.17
G. U. Clinic Expenses:		
Building Department	6.04	
Bottles	1.20	
Express .....	.38	
Electric Light	2.20	
Gauze	33.42	
Indices	6.00	
Laundry	76.82	
Medicine	144.33	
Photographs	15.00	
Surgical supplies	621.32	
Sundries	5.45	
Stamps	42.70	
Sheeting	24.08	
Printing	7.50	
Traveling expenses	144.97	
		<hr/> \$ 1,131.41
Tuberculosis Expenses:		
Burial	84.80	
Boston Consumptives' Hospital.....	159.00	
Cambridge City of.....	31.50	
Chelmsford Street Hospital.....	1,099.64	
Lakeville Sanatorium	596.06	
Lawrence Tuberculosis Hospital.....	2,890.50	
Medical services	87.00	
Medicine	79.65	
Napkins at Clinic.....	1.90	
North Reading Sanatorium.....	1,105.25	
Provisions	1,357.41	
Rutland Sanatorium	956.57	
Sputum cups	50.00	

Traveling expenses	91.66	
Tewksbury Infirmary	636.86	
Westfield Sanatorium	664.21	
	<hr/>	\$ 9,892.01
		<hr/>
		\$17,969.91

YARD SUNDRIES

Blacksmith's supplies	\$ 1,582.76
Brooms	10.00
Bran	312.50
Coal	278.50
Canvas Covers	129.00
Collars	13.50
Electric repairs	40.72
Electric Light	133.85
Gas	144.72
Hose	11.50
Hay	14,611.27
Horses	1,625.00
Harness Repairing and supplies.....	775.35
Hardware	312.07
Ice	2.80
Lumber	41.60
Laundry	810.00
Leather	13.00
Medicine	10.40
Oats	10,498.16
Repairing garage	109.43
Straw	371.89
Sundries	116.83
Telephone	12.05
Use of horses.....	799.00
Veterinary services	102.50
Water	201.27
	<hr/>
	\$33,069.67

MILK DEPARTMENT

SALARIES

Milk Inspector	\$2,070.00
Collector	1,294.20
	<hr/>
	\$3,364.20

SUNDRIES

Books	\$ 21.25
Express	2.49
Chemicals	10.48
Glassware	148.84
Motor Hire	47.10
Printing	8.50
Subscription to paper.....	8.00
Transportation	3.00
Traveling expenses	10.26
Towels	18.00
Sundries	11.57
Testing Babcock	4.00
Telephone	65.30
	<hr/>
	\$ 358.79

Medical Inspection Private Schools..... 800.00

INCOME TRANSFERRED TO GENERAL FUND, 1920

HEALTH DEPARTMENT

Swill Sold	\$3,997.71
Swill Licenses	490.00
Denatured Alcohol Licenses.....	16.00
Massage Licenses	2.00
Genito-Urinary Clinic Fees.....	704.20
Mrs. Catherine Barrett, for board of son at Tuberculosis Hospital	30.00
Mrs. Verriest, for board of John McDonald at Tuberculo- sis Hospital	30.00
Travellers' Insurance Co.....	12.00
Nicolo Bonura, for board of Jennie Bonura at Isolation Hospital	77.14
W. A. King, for ambulance for D. Kiley.....	10.00
Costos Vlahakos (Sale of Manure).....	137.63
Belleville & Waite (Sale of Manure).....	163.76
Commonwealth of Massachusetts.....	1,492.41
Town of Weymouth	53.57
Mr. Malenfant, for board of son at Cottage Hospital....	6.45
New Bedford, City of.....	14.68
Paul Burgess, for board at Cottage Hospital.....	40.00
Overdraft	32.00
T. Varnum, for use of pasture at Isolation Hospital.....	100.00
	\$7,409.55

MILK DEPARTMENT

Licenses	\$ 373.50
----------------	-----------

COST OF HEALTH DEPARTMENT, 1920

EXPENDITURES

Salaries of Board.....	\$ 2,194.89
Salary of Bacteriologist.....	1,000.00
Pay Rolls, Office.....	21,744.23
Bills, Office	17,969.91
Yard Labor	102,816.94
Yard Sundries	33,069.67
Milk Department Salaries.....	3,364.20
Milk Department Sundries.....	358.79
Medical Inspection Private Schools..	800.00
<hr/>	
Total	\$183,228.63

APPROPRIATIONS

Health Office	\$ 34,250.00
Health Yard	112,000.00
Milk Department	3,600.00
Medical Inspection Private Schools...	800.00
<hr/>	
	\$150,650.00
Additional Appropriations	16,012.00
Department Transfers	642.51
Overdraft	32.00
	<hr/>
	\$167,336.51
Deficit	\$ 15,892.12
<hr/>	
	\$183,228.63

SUMMARY, 1920


	Original Appropriation	Supplementary Appropriation	Transfers	Overdraft	Expenditures 1920	Further Expenditures 1920 Paid Out of 1921 Levy	Debit Balance	Extra Debit Balance
Health Office	\$ 34,250.00	4,012.00			\$40,077.37	\$2,741.66	\$1,815.37	\$2,741.66
Health Yard	112,000.00	12,000.00	\$642.51	\$32.00	131,801.54	4,025.07	7,187.03	4,025.07
Milk Department .	3,600.00				3,706.44	16.55	106.44	16.55
Medical Inspection								
Private Schools .	800.00				800.00			
	<u>\$150,650.00</u>	<u>\$16,012.00</u>	<u>\$642.51</u>	<u>\$32.00</u>	<u>\$176,445.35</u>	<u>\$6,783.28</u>	<u>\$9,108.84</u>	<u>\$6,783.28</u>
					6,783.28			
					<u>\$183,228.63</u>			

Year	Popu- lation	Expenditures	Revenue	Net Cost	City's Valuation	Taxation per Capita
1894	83,026	\$a57,073.73	\$ 318.43	\$56,755.03	\$69,091,536	.63
1895	84,359	46,324.04	570.80	45,753.24	68,885,732	.54
1896	85,700	45,587.11	265.57	45,321.54	69,910,472	.53
1897	87,000	48,551.84	2,369.99	46,181.85	70,389,280	.53
1898	87,000	41,026.78	3,229.02	37,779.76	70,977,303	.43
1899	90,114	40,830.23	3,796.05	37,034.18	71,255,587	.41
1900	94,969	b46,266.11	3,647.03	42,619.00	71,529,515	.44
1901	94,969	46,673.41	4,585.26	42,088.15	71,674,588	.44
1902	95,574	c54,815.33	6,103.87	48,711.46	71,903,757	.48
1903	101,959	d46,168.01	4,085.12	42,682.89	72,004,028	.41
1904	104,402	e46,451.97	4,137.31	42,314.66	71,614,907	.40
1905	94,889	f51,707.39	3,727.41	47,979.98	71,645,718	.50
1906	96,380	54,096.00	4,566.66	49,529.34	74,325,775	.51
1907	96,380	57,763.79	6,808.20	50,955.59	76,079,750	.53
1908	96,380	g57,342.61	6,418.50	50,924.11	77,858,891	.53
1909	96,380	56,346.33	6,763.73	h49,582.60	79,176,837	.51
1910	106,294	h65,911.31	h6,770.56	h59,140.75	80,094,803	.56
1911	106,294	i73,425.97	i6,762.36	i66,663.61	82,166,743	.62
1912	106,294	j74,136.25	j7,031.59	j67,104.66	84,797,348	.63
1913	106,294	k91,635.29	7,042.53	84,592.76	87,277,643	.80
1914	106,294	182,448.34	8,040.56	74,407.78	89,294,001	.70
1915	106,294	m88,841.59	6,492.16	82,349.43	92,716,047	.77
1916	107,978	n94,305.92	7,112.16	87,193.76	94,503,423	.80
1917	107,978	o104,327.19	7,379.26	96,947.93	90,820,901	.90
1918	107,978	p136,626.32	7,465.93	129,160.39	98,939,125	1.19
1919	107,878	q150,901.84	8,067.31	142,834.53	107,315,763	1.32
1920	112,759	r183,228.63	7,783.05	175,445.58	123,919,102	1.53
a. Smallpox and Swill Cremation, \$12,708.25.						
b. Smallpox, \$4,739.67						
c. Smallpox, 6,626.20						
d. Smallpox, 1,000.00						
e. Smallpox, 1,010.02						
f. Smallpox, 3,297.08						
g. Smallpox, 291.64						
h. This includes expenditures and revenue of Milk Dept.						
i.	"	"	"	"	"	"
j.	"	"	"	"	"	also Smallpox.
k.	"	"	"	"	"	"
l.	"	"	"	"	"	"
m.	"	"	"	"	"	"
n.	"	"	"	"	"	"
o.	"	"	"	"	"	"
p.	"	"	"	"	"	"
q.	"	"	"	"	"	"
r.	"	"	"	"	"	"

NINTH ANNUAL REPORT
OF
FIRE COMMISSIONER
OF THE FIRE DEPARTMENT
CITY OF LOWELL



FOR THE YEAR
NINETEEN HUNDRED AND TWENTY

Sullivan Bros., Printers  Lowell, Mass.

REPORT

LOWELL, MASS., January 1, 1921.

TO THE MUNICIPAL COUNCIL OF THE CITY OF
LOWELL:

GENTLEMEN:—I herewith submit the ninth annual report of the Commissioner of the Fire Department for the year ending December 31st, 1920.

The following statement will show the receipts and expenditures for the year:

RECEIPTS

Appropriation	\$330,055.00
Transfers	237.50
	<hr/> \$330,292.50

EXPENDITURES

Fire Alarm	1,263.44
Automobile repairs and upkeep..	5,697.96
Chemicals	305.20
Coal and wood	7,106.54
Furniture and bedding	483.75
Freight and express	93.40
Harness repairs	148.05
Hay and grain	7,373.62
Laundry	880.32
Lighting	3,027.12
Printing and stationery	331.06
Repairs	145.47
Shoeing	1,110.13
Soap	208.69
Sundries	2,196.12
Telephone	299.74

Veterinary	105.13
Wagon repairs	944.17
Water bills	942.09
	<hr/>
	\$ 32,662.00
Salaries and wages.....	308,925.66
	<hr/>
	\$341,587.66

*Deficit 11,295.16

*The payment of this deficit was provided for by vote of the Municipal Council, pursuant to Section 16, Chapter 719, Acts of 1913, and by appropriation to be made in accordance thereto.

RECEIPTS

Appropriated for Motor Driven Apparatus. \$27,800

EXPENDITURES

1 Hook and Ladder Truck.....	\$ 8,755	
2 Combination Pump, Hose and Chemical	19,000	27,755
	<hr/>	<hr/>
Balance		\$45.00

Details of the general work of the department will be found in the Chief's report which follows.

Respectfully submitted,

JOHN F. SALMON,
Commissioner of Fire Department

CHIEF'S REPORT

Chief's Office, Central Fire Station,
Lowell, Mass., January 1, 1921.

To the Commissioner of Water Works and Fire Protection
of the City of Lowell:

Dear Sir: In compliance with the City ordinance, I
have the honor of submitting for your consideration the an-
nual report of the condition and operation of the Fire De-
partment for the year ending December 31st, 1920.

SALARIES OF MEMBERS OF THE FIRE DEPARTMENT

Chief Engineer	\$3,000.00	per annum
1st Deputy Chief	2,500.00	per annum
2nd Deputy Chief	2,300.00	per annum
3rd Deputy Chief	2,300.00	per annum
Captains of Companies	5.58	per day
Lieutenants of Companies	5.30	per day
Engineers of Steamers	5.30	per day
Permanent Men, 1st grade	5.00	per day
Permanent Men, 2nd grade	4.00	per day
Electrician	5.85	per day
Linemen	35.00	per week

FORCE

The two platoon system went into effect February 4th
and all members of the force are now permanent. The force
consists of:

1 Chief Engineer	2 Chauffeurs
3 Deputy Chiefs	12 Drivers
1 Fire Alarm Operator	88 Hosemen
2 Linemen	34 Laddermen
3 Telephone Operators	20 Patrolmen
6 Engineers of Steamers	

A total of 172, of which 18 are Captains and 16 Lieutenants.

They are divided into companies as follows:

6 Steam Fire Engine Companies.

6 Horse Hose Companies, one with Chemical Engine attached.

4 Hook and Ladder Companies, one with Chemical Engine attached.

1 Protective Company.

CHANGES DURING THE YEAR

Appointed permanent	26
Appointed permanent from call force.....	1
Died, permanent	3
Pensioned, call	1
Pensioned, permanent	4
Call force abolished	

APPARATUS

The apparatus of this department is kept in the best possible condition and consist at present of:

Chief's Automobile	1
Assistant Chiefs' Automobiles.....	2
Electrician's Automobile	1
Combination Motors, Chemical and Hose Wagons	6
Triple Combinations	4
Auto Patrol Wagon.....	1
Auto Truck	1
Service Car	1
Steam Fire Engines	5
Two Horse Hose Wagons.....	3
Ladder Trucks	3
Chemical Engines	1
Hale Water Tower	1
Fuel Wagons	7
Fire Extinguishers	28

RESERVE APPARATUS

Chemical Engine	1
Electrician's Wagon	1
Two Horse Hose Wagons.....	3

HORSES

There are at the present time in the service of the department twenty-three horses.

HARNESS

The harness in use in the department at the present time consists as follows:

Sets of double swinging harness.....	3
Sets of three horse swinging harness.....	6

TELEPHONE

The telephone system is the same that was installed in 1913, consisting of one thirty line switchboard located at the Palmer Street Station, which is connected with the central office of the New England Telephone and Telegraph Company by two toll lines and also the fifteen different fire stations, the Chief's office and residence, the three District Chiefs' residences and battery room with eleven local lines.

PROTECTIVE DEPARTMENT

This department is maintained by the City and consists of twenty permanent men. They have responded to two hundred and fifty-five alarms; in service one hundred and thirty-two hours; spread three hundred and sixty-nine covers; used fifty-two extinguishers and thirty-five tanks; raised four hundred and thirty-six feet of ladder.

FIRE PREVENTION

A systematic inspection of buildings is made by the members of the Fire Department in order to relieve the fire hazard of the city. Each company has a certain district to inspect, and each inspection is recorded on a printed slip with report of conditions found. These slips are turned over to the Chief of the Department, and, when the conditions found are considered dangerous, letters are sent to both owners and tenants to have said conditions remedied. 13,659 buildings were inspected during the year by the different companies.

FIRES AND LOSSES

The whole number of alarms during the year ending December 31st, 1920 was eight hundred and seventy-six (876.) Two hundred and sixteen (216) were given from signal boxes; three hundred and forty-two (342) telephones; one hundred and fifty-six (156) stills; thirteen (13) automatics; four (4) exposures; and one hundred and forty-five (145) reported fires. The "No School" signal was given twenty-nine (29) times. There were three hundred and twenty-seven (327) fires extinguished by chemicals alone and one hundred and thirteen (113) where water was used. The remaining number were extinguished by other means or had been put out before the arrival of the department. Eighty-six (86) were in brick or stone buildings; three hundred and forty-six (346) in frame buildings, and two hundred and ninety-nine (299) other than building fires. The reported fires were mostly in frame buildings.

The whole amount of loss, except the reported fires, was two hundred ninety-one thousand, eighteen dollars and twenty eight cents (\$291,018.28.) Insurance, three million six hundred eighty-four thousand, six hundred forty-four dollars and twenty-four cents (\$3,684,644.24;) insurance paid, one hundred ninety-four thousand, two hundred fifty-five dollars and eighty-eight cents (\$194,255.88.) Loss above insurance, ninety-six thousand, seven hundred sixty-two dollars and forty cents (\$96,762.40.) Valuation, three million, eight hundred ninety-eight thousand, two hundred forty-five dollars (\$3,898,245.) The reported loss was nine thousand, nine hundred and ninety-four dollars and four cents (\$9,994.04;) insurance three million, four hundred forty-four thousand, four hundred and ninety-four dollars (\$3,444,494;) valuation, three million, five hundred and forty thousand, six hundred fifty dollars (\$3,540,650.)

There have been eleven (11) alarms out of the city, to which some part of the department has responded, for which no insurances are kept; Chelmsford 1, Dracut 4, East Chelmsford 1, North Chelmsford 2, Tewksbury 2, West Chelmsford 1.

There have been thirty-one (31) fires where the loss was \$1000 and over.

January 6th, 85 Tanner Street, owned by David Ziskind and occupied by Lowell Waste Paper Company, loss \$20,636.51.

January 24th, Lawrence Street, owned and occupied by the Primitive Methodist Church, loss \$12,852.00.

February 1st, 94 Princeon Street, owned and occupied by S. W. Abbott, loss \$7,013.47.

February 8th, 8 Oak Avenue, owned by B. F. Stevens and occupied by M. Albanion, loss \$3.360.

February 28th, 20 Nelson Street, owned and occupied by I. E. Shaw, loss \$2,200.

March 6th, 361 Stevens Street, owned and occupied by C. H. Willis, loss \$5,700.

March 13th, 22 O'Connell Street, owned and occupied by K. Stackpole, loss \$1,400.

March 21st, 416 Suffolk Street, owned by Nora Murphy and occupied by several, loss \$2,348.27.

March 26th, 13 Adams Street, owned by P. H. Ryan and occupied by P. Donohoe, loss \$1,291.70.

April 7th, Shattuck Street, owned by Gregg & Hart and occupied by the Thompson Hardware Company, loss \$1,056.70.

April 25th, 236 Salem Street, owned and occupied by A. DeLamotte, loss \$5,281.

May 10th, 58 Fremont Street, owned by F. Hebert and occupied by E. M. Gaffney, loss \$1,622.25.

May 19th, 373-81 Middlesex Street, owned by I. Bernstein and occupied by Sinteos and Coffetgatisis, loss \$3,000.03.

June 22nd, 12 John Street, owned by James C. Reilly, Trustee, and occupied by Cherry & Webb, loss \$61,893.73.

July 8th, 62 Suffolk Street, owned by A. Husson and occupied by several, loss \$2,821.50.

July 15th, Pawtucket Street, owned and occupied by C. M. A. C. Association, loss \$1,730.

August 23rd, 18 Western Avenue, owned by G. L. Cady & Sons and occupied by several, loss \$7,203.51.

September 3rd, 588 Merrimack Street, owned by M. Ansara and occupied by J. J. Brennan Company, loss \$1,082.

October 5th, rear 592 Broadway Street, owned and occupied by P. D. McAuliffe, loss \$1.370.74.

October 22nd, 139 Gorham Street, owned by J. F. Saunders Estate and occupied by Saunders Market Company, loss \$3,020.77.

November 12th, 34 Brooks Street, owned and occupied by G. Parianos, loss, \$1,680.

November 15th, 411 Adams Street, owned and occupied by K. Zaroulis, loss \$1,878.

November 17th, 46 Circuit Avenue, owned and occupied by Mrs. L. Therriault, loss \$5,100.

November 21st, 445 Middlesex Street, owned and occupied by T. Hoban, loss \$1,025.

November 22nd, 121 Eleventh Street, owned and occupied by F. D. Hall, loss \$14,236.

November 30th, 53 Central Sreet, owned by J. T. Stevens Heirs and occupied by several, loss \$70,482.39.

December 3rd, 807 Pawtucket Street, owned and occupied by A. Boyle, loss \$3,065.

December 24th, 101 Pleasant Street, owned and occupied by William J. and Annie Kelley, loss \$1,013.

December 26th, 33 Lawrence Street, owned and occupied by A. J. Culver, loss \$1,361.

December 27th, 388 Middlesex Street, owned by David Ziskind and occupied by K. Anastasion, loss \$2,948.26.

December 30th, 285 Thorndike Street, owned by G. Kahan and occupied by G. Kahan and others, loss \$21,948.29.

The total loss on these thirty-one (31) fires was two hundred seventy-one thousand, six hundred twenty-one dollars and twelve cents (\$271,621.12) leaving nineteen thousand, three hundred ninety-seven dollars and sixteen cents (\$19,397.16) to be divided between the other seven hundred alarms.

A comparison of the Total Number of Alarms and Losses from January, 1905 to January, 1921:

Year	Alarms	Ins. Loss	Unins. Loss	Total Loss
1905	798	\$ 89,112.18	\$ 1,850.00	\$ 90,962.18
1906	557	64,994.94	2,270.71	67,265.65
1907	838	242,167.98	39,624.52	281,792.50
1908	935	350,873.25	16,421.80	367,295.05
1909	963	177,759.11	8,705.80	186,464.91
1910	904	64,781.93	3,188.00	67,969.93
1911	1101	86,034.34	19,295.48	105,329.82
1912	959	260,833.26	9,575.99	270,409.25
1913	882	200,600.03	19,825.26	220,425.29
1914	1028	265,804.53	17,476.53	283,281.06
1915	926	170,262.53	12,127.67	182,390.20
1916	896	138,170.66	3,400.86	141,571.52
1917	1031	129,207.10	14,994.73	144,201.83
1918	1047	161,940.71	37,688.51	199,629.22
1919	942	211,681.50	20,461.42	232,142.92
1920	876	204,249.92	96,762.40	301,012.32

NUMBER OF ALARMS OF FIRE EACH MONTH

January	65	August	45
February	43	September	43
March	63	October	60
April	82	November	76
May	72	December	56
June	57	Reported	145
July	69		
Total			876

CAUSES OF FIRES AND ALARMS

Alarms for same fire.	27	Hot coals	2
Ammonia tank leaking.	1	Hot cinders	4
Automobiles	31	Hot iron in oil.	1
Boiler smoking.	5	Insulation of wires.	1
Broken gas pipe.	1	Kerosene stove exploded.	2
Brush	7	Kettle of fat.	3
Candles	1	Lamp in incubator.	1
Carelessness	19	Lamp set curtain.	1
Careless use of matches.	13	Leak in water pipe.	1
Cat in tree.	1	Lightning	5
Children and matches.	16	Motor	3
Children locked in room.	1	Motor cycle	1
Chimney	79	No school	29
Cigaret	37	Oil heater	2
Combustion	37	Oil lamp	1
Defective boiler	1	Oil stove	5
Defective chimney	13	Oily rags	2
Defective funnel	1	Out of the city.	11
Defective oven	1	Overheated boiler	4
Defective stove pipe.	1	Overheated chimney	7
Defective wires	5	Overheated funnel	2
Drying plaster	1	Overheated furnace	4
Drying wood in oven.	1	Overheated motor	1
Dump	53	Overheated stove	6
Dust in chute.	1	Pan of meat.	5
Electric heater	1	Picker machine	1
Electric wires	3	Plug on boiler blew out.	1
Exposure	4	Plumber's torch	5
False alarms	13	Rats and matches.	11
Fat on stove	4	Rekindled	18
Fireworks	9	Reported alarms	145
Friction from belt.	1	Rescuing boys on rock.	1
Furnace smoking	1	Rubbish	28
Gas heater	1	Second alarms	5
Gas jet	4	Set by boys	7
Gas leak	2	Short circuit on motor.	1
Gas stove	5	Smoke from boiler.	1
Gasoline in sewer.	2	Smoking set bed.	9
Gasoline stove	1	Sparks from chimney.	5
Gasoline tank leaking.	1	Suarks from motor.	2
Gasoline torch	1	Sparks in chute.	2
Grass	84	Sparks in dust pan.	1
Grease on stove	3	Sparks set roof.	10
Heat set off sprinkler.	1	Sprinkler pipe burst.	1
Hot ashes	7	Steam escaping	1
Hot box	2	Steam from clothes.	1

Steam pipe	1	Thawing water pipes....	7
Stove pipe	1	Unknown	1
Stove polish	1	Vulcanizing tires	1
Stove set woodwork.....	1	Water front exploded...	1
Stove smoking	10	Water out of boiler.....	1
Tar kettle	4	Water pipe burst.....	1
Thermostat system out of		Wires crossed	4
order	11	Wires set tree.....	1

NUMBER OF ALARMS ANSWERED BY MEMBERS OF THE DEPARTMENT ON DAYS OFF

2nd Deputy Chief D. H.		F. E. Alcott.....	2
Crowley	1	W. H. Bamford.....	4
3rd Deputy Chief T. F.		J. Bernier	3
Saunders	3	R. Bisailon.....	3
1st Deputy Chief J. C.		F. Boynton	1
Sullivan	2	F. Broadbent	3
Captain C. E. Abare.....	1	R. W. Broadbent.....	4
Captain E. W. Bartlett....	8	P. F. Calnan	1
Captain T. Brown.....	2	R. Carland	2
Captain R. E. Burns.....	1	W. G. Chain.....	1
Captain T. W. Collins....	2	W. F. Christie.....	4
Captain T. F. Conway....	2	C. H. Cogswell.....	1
Captain E. H. Dearth.....	3	G. A. Collins.....	1
Captain G. E. Flint.....	3	M. I. Collins	2
Captain D. W. Hilliard ..	2	B. F. Connors.....	1
Captain O. A. Knapp.....	1	J. F. Convery	2
Captain J. J. McCafferty..	4	W. J. Corbett.....	1
Captain H. A. Merrill....	2	H. G. Cote.....	1
Captain J. A. Shea.....	3	G. A. Crawford.....	2
Lieut. G. S. Alcott.....	2	G. A. Dickey.....	1
Lieut. G. W. Alcott.....	2	W. F. Dolan.....	2
Lieut. W. M. Barrett....	3	J. J. Donahoe.....	1
Lieut. J. M. G. Burns....	4	J. T. Doyle.....	1
Lieut. G. A. Campbell....	5	M. E. Egan.....	2
Lieut. G. H. Chapman....	2	W. F. Egan.....	2
Lieut. E. J. P. Cunningham	2	J. N. Emerson.....	1
Lieut. J. W. Halstead....	2	J. D. Finnegan.....	2
Lieut. P. F. Mahoney....	2	J. A. Fletcher.....	3
Lieut. P. F. Mooney.....	1	J. E. Fontaine.....	4
Lieut. A. F. Prescott....	2	Q. A. Foster.....	2
Lieut. L. P. Reed.....	1	F. J. Geary.....	1
Lieut. C. F. Stackpole....	1	M. J. Gildea.....	3
Lieut. T. H. Welch.....	2	N. Gradchamp.....	4

H. V. Green.....	3	P. J. Mooney	4
J. A. Haley.....	5	J. P. Moore.....	1
P. A. Healy.....	1	J. J. Moran, Jr.....	1
H. W. Hilliard.....	2	H. R. Morrison.....	1
W. S. Holt	3	B. J. Mullen.....	2
G. J. Hurley.....	4	J. J. Mulligan.....	2
J. W. Jantzen.....	4	D. J. O'Connor.....	4
P. A. Johnston.....	4	E. J. O'Donnell.....	3
A. E. Kenefick.....	1	J. O'Hare	1
A. E. Kidder.....	1	W. H. Oke.....	1
W. H. Kirkpatrick.....	2	P. H. O'Loughlin.....	3
D. Laferriere	1	R. Otley	3
E. Landry	1	S. R. Pendexter.....	4
W. J. Lane.....	1	E. Perham	1
W. O. Lussier.....	2	P. J. Regan	1
T. F. Maguire.....	1	W. F. Riley.....	1
J. J. Malone.....	1	J. J. Rinehardt.....	1
T. P. McColough.....	2	J. H. Rogers.....	3
J. F. McCready.....	1	E. E. Smith.....	1
G. H. McDermott.....	3	F. J. Sullivan.....	1
J. E. McGann.....	4	R. N. Symonds	3
J. F. McGuinness.....	3	J. F. Thomas.....	2
A. B. McLaughlin.....	1	E. J. Tighe.....	4
H. A. McLaughlin.....	1	G. J. Tracy.....	1
M. F. McNally.....	2	J. H. Tracy.....	3
W. E. McNally.....	2	J. J. Wholey.....	4
J. P. Mealey.....	3		

SERVICE OF THE DEPARTMENT FOR 1920

	Number of alarms attended	Number of hours worked	Feet of Hose laid	Hours of hydrants in use	Number of extinguishers used	Number of chemical tanks used	Feet of ladders raised	Hours engines worked	Number of covers used
Engine No. 1	106	63 $\frac{3}{4}$	6,350	15 $\frac{3}{4}$	39	10	210	4 $\frac{1}{4}$	
Engine No. 2	149	96 $\frac{1}{4}$	12,960	30 $\frac{3}{4}$	70	22	495	4	
Engine No. 3	151	82	8,050	17 $\frac{1}{4}$	31	18	300	1 $\frac{1}{2}$	
Engine No. 4	103	64 $\frac{3}{4}$	6,200	21 $\frac{3}{4}$	53	7	250	$\frac{1}{2}$	
Engine No. 5	68	73 $\frac{3}{4}$	7,300	35 $\frac{3}{4}$	29	8	44		
Engine No. 6	128	77	9,000	13 $\frac{1}{2}$	41	15	465	1 $\frac{3}{4}$	
Hose No. 7	86	53 $\frac{3}{4}$	3,500	12 $\frac{1}{2}$	37	6	10		
Hose No. 8	157	87 $\frac{1}{2}$	7,500	18 $\frac{1}{4}$	45	39	160		
Hose No. 9	65	66 $\frac{1}{4}$	7,250	29 $\frac{1}{4}$	25	8	35		
Hose No. 10	79	153 $\frac{3}{4}$	11,750	96 $\frac{3}{4}$	27		186		
Hose No. 11	55	94 $\frac{1}{2}$	7,700	54 $\frac{1}{2}$	21	9	210		
Hose No. 12	115	66 $\frac{1}{4}$	6,450	23 $\frac{1}{4}$	15		1,045		
Truck No. 1	45	61 $\frac{1}{2}$	352		10	14	1,392		
Truck No. 2	106	73 $\frac{1}{2}$					1,800		
Truck No. 3	122	79 $\frac{1}{4}$					586		
Truck No. 4	57	41			52	35	436		369
Protective	255	132							
	1,847	1,366 $\frac{1}{4}$	94,362	369 $\frac{1}{4}$	495	191	7,624	12	369

FATALITIES

April 13th. Pereca Freitas, 110 Tilden Street, age ten months. Charcoal iron set clothing.

May 1st. Mrs. Rufus A. Jameson, 223 Appleton Street, age forty-nine years. Clothing caught from kereosene.

July 1st. Dorothy Absay, 99 Suffolk Street, age nine years. Burning papers set clothing.

August 8th. Irving A. Sullivan, 332 Pawtucket Street, age eighteen years. Used a match to see if there was any gasoline in tank. Fumes ignited burning him.

September 22nd. Manuel Pombrisho, Marshall Avenue, age fifty years. Burned while running a still for liquor with gasoline heater.

October 16th. Constane Lutz, 53 Dracut Street, age five years. Playing with matches in yard, set clothing.

November 12th, Constatine Parianos, age seven years, Vasilea Parrianos, age five years, Catherine Parianos, age three years, all of 34 Brooks Street. Children set fire with matches.

In conclusion I wish to extend my thanks to His Honor, the Mayor, the Commissioner of Water Works and Fire Protection and the Municipal Council for the interest taken in matters pertaining to the Fire Department. I also wish to thank the officers and members of the Department for the ability, faithfulness and willingness shown in the performance of their duties. I wish to extend thanks to the Chief of Police and the members of the Police Department for the assistance rendered at fires.

Respectfully submitted,
EDWARD F. SAUNDERS,
Chief of Fire Department

IN MEMORIAM

**FRANK A CORCORAN
HOSEMAN**

ENGINE COMPANY NO. 2
Appointed February 18, 1917
DIED
August 6, 1920

**PATRICK F. FINNERTY
LADDERMAN**

TRUCK COMPANY NO. 3
Appointed July, 1903
DIED
September 1, 1920

**ROBERT H. OTLEY
HOSEMAN**

ENGINE COMPANY NO. 1
Appointed December, 1897
DIED
November 30, 1920

FIRE DEPARTMENT

January 1st, 1921

Commissioner

JOHN F. SALMON

Office, City Hall
Residence, 96 Caburn Street

Chief Engineer

EDWARD F. SAUNDERS Office, Palmer St. Engine House
Residence, 24 Mt. Washington Street

District Chiefs

JAMES C. SULLIVAN	250 Rogers Street
DANIEL H. CROWLEY	26 Marginal Street
THOMAS F. SANDERS	168 School Street

Chief's Chauffeurs

JOHN F. AMBROSE	212 Princeton Street
JOSEPH L. CROWE	116 Crawford Street

Fire Alarm Operator

THOMAS F. CONWAY	128 Pleasant Street
THOMAS McCORMICK, Lineman	57 Fourth Street
ARTHUR E. KING, Lineman	205 Stackpole Street

Telephone Operators

PHILIP McLAUGHLIN	16 Keene Street
HARRY B. SANDERS	20 Manahan Street
WILBUR H. OKE	175 Westford Street

LIST OF MEMBERS, GIVING RANK AND RESIDENCE
BY COMPANIES

ENGINE COMPANY NO. 1

795 Gorham Street

Thomas W. Collins, Captain, Badge No. 11 145 Andrews St.
Philip F. Mocney, Lieutenant, Badge No. 18 203 Moore St.
James W. Jantzen, Engineer, Badge No. 16 3 Olive St.
Frank G. Collins, Engineer, Badge No. 15 798 Moody St.
James O'Hare, Hoseman, Badge No. 13 27 Ellsworth St.
W. Henry Kirkpatrick, Hoseman, Badge No. 10 35 London
William J. Heelon, Hoseman, Badge No. 14 12 Jennings Pl.
James H. Gray, Hoseman, Badge No. 1 23 Ellsworth St.
Michael T. McCann, Hoseman, Badge No. 17 28 Bowden St.
Daniel F. Murphy, Hoseman, Badge No. 19 80 Anderson St.

ENGINE COMPANY NO. 2

45 Branch Street

Joseph D'Amour, Captain, Badge No. 2 24 Fisher St.
Charles F. Stackpole, Lieutenant, Badge No. 21 25 Grace St.
George A. Crawford, Hose., Badge No. 25 47 Highland Ave.
Forest E. Alcott, Hoseman, Badge No. 28 57 Coral St.
Frank Broadbent, Hoseman, Badge No. 27 121 Branch St.
Herbert W. Hilliard, Hoseman, Badge No. 22 20 Osgood St.
Romuald Bisailon, Hoseman, Badge No. 26 67 Mammoth Rd
Thomas J. Gillick, Hoseman, Badge No. 24 29 Lyon St.

ENGINE COMPANY NO. 3

Palmer Cor. Middle Street

Frank Hoyt, Captain, Badge No. 30 21 Eighth Ave.
Elbridge H. Dearth, Capt., Badge No. 31 64 So. Loring St.
John J. Rinehardt, Hoseman, Badge No. 39 101 Gates St.
Hugh V. Green, Hoseman, Badge No. 35 547 Lakeview Ave.
John J. McCarthy, Hoseman, Badge No. 32 150 Fourth Ave.
Bartholomew J. Mullen, Hoseman, Badge No. 37 33 Ellis St.
Thomas F. Sullivan, Hoseman, Badge No. 34 72 Boylston St.
William J. Corbett, Hoseman, Badge No. 3 134 Pleasant St.
Walter E. McNally, Hoseman, Badge No. 38 40 Mead St.

ENGINE COMPANY NO. 4

High Street

J. Edward Burns, Captain, Badge No. 4 39 Whitehead Ave.
Alfred F. Prescott, Lieutenant, Badge No. 42 565 Wilder St.
Jay D. Ismond, Engineer, Badge No. 47 246 Beacon St.
William F. Dolan, Hoseman, Badge No. 43 Engine House
James T. Doyle, Hoseman, Badge No. 49 31 Ferry Lane
George J. Tracy, Hoseman, Badge No. 41 30 Riverside St.
Michael E. Egan, Hoseman, Badge No. 48 113 Pleasant St.
Francis J. Sullivan, Hose., Badge No. 44 151 Lawrence St.
George E. Schofield, Hoseman, Badge No. 40 95 Myrtle St.
Moses I. Collins, Engineer, Badge No. 23 20 Coral St.
Peter J. Regan, Hoseman, Badge No. 45 316 Rogers St.

ENGINE COMPANY NO. 5

29 Fourth Street

James J. McCafferty, Captain, Badge No. 55 74 Fourth St.
Patrick F. Mahoney, Lieutenant, Badge No. 53 18 Fourth St.
Alonzo E. Kidder, Driver, Badge No. 5 61 Twelfth St.
Charles L. Brown, Engineer, Badge No. 51 Engine House
Herman R. Morrison, Eng., Badge No. 29 342 Westford St.
Edson S. Barnes, Hoseman, Badge No. 50 68 Beacon St.
John C. O'Neil, Hoseman, Badge No. 57 20 Sixth Ave.
Frank E. Turner, Hoseman, Badge No. 54 15 Ware St.
Hugh A. McLaughlin, Hose., Badge No. 56 127 Bellevue St.
Archibald E. Kenefick, Hose., Badge No. 58 15 Stackpole St.

ENGINE COMPANY NO. 6

Fletcher Street

Richard E. Burns, Captain, Badge No. 68 203 Westford St.
William M. Barrett, Lieut., Badge No. 61 16 W. Bowers St.
John A. Fletcher, Hoseman, Badge No. 6 137 Riverside St.
Samuel R. Pendexter, Hose., Badge No. 60 22 W. Bowers St.
Thomas F. Maguire, Hoseman, Badge No. 63 14 Varney St.
Edgar Perham, Hoseman, Badge No. 69 55 Arlington St.
John J. Wholey, Hoseman, Badge No. 66 48 Mt. Vernon St.
Edward J. O'Donnell, Hose., Badge No. 64 190 Fletcher St.

HOSE COMPANY NO. 7

490 Central Street

James A. Shea, Captain, Badge No. 70 22 Bleachery St.
Thomas H. Welch, Lieutenant, Badge No. 72 93 Chapel St.
James H. Tracy, Hoseman, Badge No. 76 147 Concord St.
William J. Lane, Hoseman, Badge No. 74 505 Central St.
Patrick J. Mooney, Hose., Badge No. 73 207 Mammoth Rd.
Bernard F. Connors, Hoseman, Badge No. 75 76 Elm St.

HOSE COMPANY NO. 8

Merrimack, Corner Race Street

George F. Flint, Captain, Badge No. 82 63 Woodward Ave.
Gilman S. Alcott, Lieut., Badge No. 88 1194 Middlesex St.
George H. McDermott, Hose., Badge No. 86 221 White St.
Joseph F. Convery, Hoseman, Badge No. 83 19 Bowers St.
Joseph H. Rogers, Hoseman, Badge No. 89 11 Read St.
Henry D. Carpentier, Hose., Badge No. 84 30 W. Meadow R.
James P. McCready, Hoseman, Badge No. 81 126 Bowers St.

HOSE COMPANY NO. 9

Lincoln Street

Orison A. Knapp, Captain, Badge No. 9 47 Hawthorne St.
George H. Chapman, Lieut., Badge No. 92 53 Quebec St.
Chaerls A. Rock, Driver, Badge No. 93 673 Chelmsford St.
Fred Boynton, Hoseman, Badge No. 98 148 Smith St.
Fred O. J. Townsend, Hose., Badge No. 96 14 Somerset St.
Hamblin S. Gardner, Hoseman, Badge No. 90 8 Hastings St.
George A. Dickey, Hoseman, Badge No. 97 11 Hastings St.
William T. Foss, Hoseman, Badge No. 91 37 Pond St.

HOSE COMPANY NO. 10

Mammoth Road

Edwin W. Bartlett, Captain, Badge No. 160 559 Fletcher St.
William F. Tighe, Lieutenant, Badge No. 162 203 Cross St.
Robert W. Broadbent, Driver, Badge No. 161 11 Fourth Av.
Edward F. Farrell, Hoseman, Badge No. 166 12 Third Ave.
David Laferriere, Hose., Badge No. 167 100 W. Meadow Rd.
Edgar E. Smith, Hoseman, Badge No. 165 206 Wilder St.
Andrew B. McLaughlin, Hose., Badge No. 163 79 Willie St.
Frank A. Kappler, Hoseman, Badge No. 164 125 London St.

HOSE COMPANY NO. 11

Lawrence Cor. So. Whipple Street

William A. Dolan, Captain, Badge No. 200 56 Crowley St.
Edward Jennings, Lieut., Badge No. 201 859 Lawrence St.
John D. Finnegan, Driver, Badge No. 203 732 Lawrence St.
John N. Emerson, Hoseman, Badge No. 202 27 Carter St.
Michael J. O'Connor, Hose., Badge No. 204 101 London St.
Peter B. Gray, Hoseman, Badge No. 207 71 Whipple St.
James H. Lannon, Hose., Badge No. 209 819 Lawrence St.
Timothy J. Dewire, Hoseman, Badge No. 208 315 High St.

HOSE COMPANY NO. 12

West Sixth Street

Charles E. Abare, Captain, Badge No. 220 51 Fifth St.
Lewis P. Reed, Lieutenant, Badge No. 221 874 Lakeview Ave
Joseph Bernier, Hoseman, Badge No. 223 263 West Sixth St.
Edward Landry, Hoseman, Badge No. 226 29 Beaulieu St.
William F. Egan, Hoseman, Badge No. 225 69 Lilley Ave..
William E. Gorman, Hoseman, Badge No. 224 17 Ellis St.

TRUCK COMPANY NO. 1

Lawrence Street

Timothy Brown, Captain, Badge No. 210 27 So. Whipple St.
Joseph M. G. Burns, Lieut., Badge No. 209 543 Rogers St.
John J. Lowney, Driver Badge No. 215 361 Lincoln St.
Jas. F. McGuinness, Ladder'n, Badge No. 213 119 Agawam
Patrick H. O'Loughlin, Ladder'n, Badge No. 216 124 Chapel
John J. Donohoe, Ladderman, Badge No. 211 76 Agawam
Edward J. Tighe, Ladderman, Badge No. 212 72 Chestnut St
George A. Collins, Ladderman, Badge No. 217 145 Andrews
Michael J. Gildea, Ladderman, Badge No. 219 72 Swift St.
William J. Graham, Ladder'n, Badge No. 138 17 Bleachery

TRUCK COMPANY NO. 2

45 Branch Street

Daniel W. Hilliard, Captain, Badge No. 121 20 Osgood St.
George W. Alcott, Lieut., Badge No. 120 202 Westford St.
Quincy A. Foster, Driver, Badge No. 126 29 Midland St.
William P. Maker, Ladderman, Badge No. 123 12 Flemings
Cornelius J. Brosnan, Ladder'n, Badge No. 129 42 2nd Ave.
Patrick F. Calnan, Ladderman, Badge No. 125 130 Concord
Frank J. Geary, Ladderman, Badge No. 127 16 New St.
Peter J. O'Rourke, Ladderman, Badge No. 128 22 Shaffer St.
Clarence E. Gillis, Ladderman, Badge No. 122 261 Third St.
Francis J. Kelleher, Ladder'n, Badge No. 124 111 Agawam

TRUCK COMPANY NO. 3

Palmer Street

Harold L. Foster, Lieutenant, Badge No. 110 31 Midland St.
Philip J. Connor, Driver, Badge No. 112 506 Gorham St.
Robert Carland, Ladderman, Badge No. 111 17 Second St.
John J. McManmon, Lad'n, Badge No. 114 23 Woodward Av
Martin F. McNally, Ladder'n, Badge No. 115 57 So. Whipple
John P. Moore, Ladderman, Badge No. 116 1017 Central St.
John J. Moran, Jr., Ladder'n, Badge No. 118 43 Anderson St
Daniel F. O'Connor, Ladder'n, Badge No. 228 178 Concord
George W. Cummings, Ladder'n, Badge No. 95 11 Third Ave
Paul A. Johnston, Ladder'n, Badge No. 117 398 Broadway

TRUCK COMPANY NO. 4

West Sixth Street

Herbert A. Merrill, Captain, Badge No. 100 4 Wachusett St.
Edward P. Cunningham, Lieut., Badge No. 103 109 Mam. Rd
Edward A. Walsh, Ladder'n, Badge No. 106 19 Mt. Vernon
William O. Lussier, Ladderman, Badge No. 102 9 Bowers St.
Joseph E. Fontaine, Ladder'n, Badge No. 109 280 W. Sixth
C. Herbert Cogswell, Lad'n, Badge No. 108 85 Whitney Ave.
George J. Hurley, Ladderman, Badge No. 107 25 Read St.
Ray N. Symonds, Ladderman, Badge No. 104 519 Broadway
John F. Thomas, Ladderman, Badge No. 105 103 Hale St.
William F. Riley, Ladderman, Badge No. 101 41 West St.

PROTECTIVE COMPANY NO. 1

Palmer Cor. Middle Street

George A. Campbell, Captain, Badge No. 135 41 School St.
James W. Halstead, Lieut., Badge No. 151 115 Warwick St.
Joseph J. Malone, Patrol'n, Badge No. 133 427 Lincoln St.
Berry M. Simpson, Patrolman, Badge No. 132 259 Methuen
William F. Christie, Patrolman, Badge No. 130 155 W. Sixth
Willis S. Holt, Patrolman, Badge No. 134 8 Hale St.
Hugh F. Finnerty, Patrol'n, Badge No. 218 124 Wannalancit
William H. Bamford, Patrolman, Badge No. 136 53 Main St.
Stephen J. Callahan, Patrolman, Badge No. 46 47 Walnut
William G. Chain, Patrolman, Badge No. 169 45 Coral St.
Harry G. Cote, Patrolman, Badge No. 227 Engine House
Paul A. Healey, Patrolman, Badge No. 36 25 Butler Ave.
Thomas P. McColough, Patrol'n, Badge No. 168 174 Crosby
William E. McNiff, Patrolman, Badge No. 80 10 r. 94 High
John P. Mealey, Patrolman, Badge No. 229 215 Cross St.
John J. Mulligan, Patrolman, Badge No. 38 174 Crosby St.
Nap. Grandchamp, Patrol'n, Badge No. 137 12 Arthur Ave.
Joseph E. McGann, Patrolman, Badge No. 131 37 Cosgrove
Walter F. Powers, Patrolman, Badge No. 80 546 Central St.
Edward F. Sullivan, Patrol'n, Badge No. 222 99 Andrews St.

FIRE ALARM TELEGRAPH

LOCATION—Palmer Street Engine House
THOMAS F. CONWAY, Operator
THOMAS McCORMICK, Lineman
ARTHUR E. KING, Lineman

Ten-circuit Automatic Repeater with Storage Battery
of 600 cups.

Miles of Wire	113
Signal Boxes	168
Engineers' Gongs	10
Engine House Gongs	15
Indicators	16
Tape Register	1
Bell Strikers	14

Gong and Indicator at Police Station.
Gong in Pumping Station.
Gong on Merrimack Square.
Gong on Tower's Corner.
Gong on Northern Depot.
Gong corner Moody and Aiken Streets.
Gong corner Bridge and First Streets.
Gong corner Andover and Fayette Streets.

The strikers are located as follows: Palmer Street Engine House, Varnum School House, High Street Church, Court House, No. 1 Engine House, No. 6 Engine House, Highland School House, Pawtucketville Engine House, Franklin School House, Lawrence Street Engine House, Cornell Street School House, West Sixth Street Engine House, Sycamore Street School House, Weed Street School House.

Eighteenth Annual Report

OF THE BOARD
OF

Park Commissioners

OF THE

CITY OF LOWELL



For the Year Ending December 31

1920

PRINTED BY C. I. HOOD CO., LOWELL, MASS.



LIFE GUARDS AT PUBLIC BATH HOUSE

Department of Public Parks

COMMISSIONERS' REPORT

*To His Honor the Mayor and the Municipal Council of
the City of Lowell, Massachusetts.*

As required by Chapter 28, Section 13, of the Revised Laws of Massachusetts, entitled "Public Parks, Playgrounds and the Public Domain," the Board of Park Commissioners of the City of Lowell has the honor to submit their annual report.

CLARENCE M. WEED,
Chairman.

Board of Park Commissioners

1920

CLARENCE M. WEED, 1918-1923

THOMAS F. MCKAY, 1919-1924

ALEXANDER E. ROUNTREE, 1917-1922

ROBERT F. MARDEN, 1916-1921

HARVEY B. GREENE, 1920-1925

COMMITTEES

Parks: MR. GREENE, MR. MARDEN, MR. WEED

Playgrounds: MR. MARDEN, MR. GREENE, MR. WEED

Trees: MR. ROUNTREE, MR. MCKAY, MR. GREENE

Legislation: MR. MCKAY, MR. ROUNTREE, MR. MARDEN

OFFICERS

Chairman

CLARENCE M. WEED

Secretary

ALEXANDER E. ROUNTREE

Superintendent of Parks and Playgrounds

JOHN WOODBURY KERNAN

Financial Report

PARKS

Appropriation	\$38,000.00
Credits for year 1920.....	5,042.05
	<hr/>
	\$43,042.05
Expended for Labor.....	\$27,153.87
Expended for Materials and Supplies.....	15,878.16
	<hr/>
	\$43,032.03
Balance	\$ 10.02

SPECIAL APPROPRIATIONS

APPROPRIATION FOR ACQUIRING LAND FOR PUBLIC PARK SOUTHERLY SIDE OF RIVERSIDE STREET

Appropriation	\$12,000.00
Credit	320.00
	<hr/>
Total Appropriation	\$12,320.00
Expended for Material and Supplies.....	\$12,320.00
	<hr/>
	\$12,320.00
Balance	\$ 0.00

NEW BATH HOUSE

Balance, 1920	\$ 252.43
Transferred from New Comfort Station Appro.	24.17
	<hr/>
Total Appropriation	\$ 276.60
Expended for Construction.....	\$ 276.60
	<hr/>
	\$ 276.60
Balance	\$ 0.00

NEW COMFORT STATION

Appropriation	\$ 9,000.00
Expended for Construction.....	\$ 8,850.23
Transferred to New Bath House Appropriation	24.17
	<hr/>
	\$ 8,874.40
	<hr/>
	\$ 125.60
Set aside account of New Comfort Station.	125.60
	<hr/>
Balance	\$ 0.00

BALANCE SHEET—PARKS

MAINTENANCE

Name	Labor \$	Material	Improvement	Total \$
Belvidere Park	242.10			242.10
Cardinal O'Connell Parkway	170.99		117.49	288.48
City Hall and Mem. Bldg. Grounds	279.40	310.15		589.55
Coburn Park	50.00		31.00	81.00
Colonial Ave. Riverbank	65.70	10.00		75.70
Fair Grounds	147.97	5.25		153.22
Franklin School	34.31			34.31
Harris Oval	52.31			52.31
Hovey Square	15.74			15.74
Lincoln Square	29.80			29.80
Lucy Larcom Park	41.06			41.06
Lincoln Playground	23.05			23.05
Mt. Vernon	56.25			56.25
Monument Square	56.82			56.82
Mansur Square	15.18			15.18
North Common	1,621.94		684.87	2,306.81
Penniman Square	14.62			14.62
Princeton Square	7.87			7.87
Raven Road Park	15.30		140.00	155.30
Rogers Fort Hill Park	4,093.52		500.00	5,900.93
Riverside Park	20.82	1,307.41		20.82
Parker-Spalding Park	2.81			2.81



WATCHING OPEN-AIR "MOVIES" AT SOUTH COMMON

Name	Labor	Material	Improvement	Total
Shedd Park	1,000.00	95.15	1,597.56	2,692.71
South Common	3,240.42		876.48	4,116.90
Tyler Park	217.51			217.51
Park at Cor. Nesmith & Rogers Sts	30.38			30.38
Varnum Ave. Riverbank	25.76	103.00		128.76
Varnum Park	48.36			48.36
Varnum Ave. Parkway	25.59	179.58	1,841.08	2,046.25
Water Works Square	39.93			39.93
New Comfort Station			1,822.54	1,822.54
Office	4,066.73	446.83		4,513.56
Playgrounds	2,698.20	540.25		3,238.45
Stable	139.46	323.46		462.92
Care of Auto and Truck		892.39		892.39
Deer at Fort Hill Park		73.30		73.30
New Auto			1,725.00	1,725.00
Bath House	168.34		3,252.65	3,420.99
Moving Pictures	228.00	1,565.34		1,793.34
Attendants at Bath House	1,783.00			1,783.00
Trees	3,416.07	105.94	300.00	3,822.01
	<u>\$24,185.31</u>	<u>\$5,958.05</u>	<u>\$12,888.67</u>	<u>\$43,032.03</u>

PARK AREAS AND THEIR VALUATION

Belvidere Park	1.77	Acres	\$ 20,000
Boulevard Park	6.031	"	5,255
Cardinal O'Connell Park	0.114	"	25,844
City Hall and Memorial Grounds	0.50	"	65,700
Coburn Square	0.252	"	1,000
Colonial Avenue Riverbank	3.50	"	2,000
Cor. Rogers and Nesmith Sts.	0.012	"	622
Fayette St. Playground	0.170	"	2,000
Franklin Square	0.058	"	1,500
Glacial Oval			100
Harris Oval	0.12	"	366
Hillside Park	0.061	"	80
Hovey Square	0.010	"	50
Hutchinson Square	0.037	"	150
Lenox Square	0.181	"	1,500
Lincoln Playground	1.525	"	6,000
Lincoln Square	0.016	"	200
*Lucy Laicom Park	0.50	"	21,970
Mansur Square	0.050	"	150
Middlesex Square	0.034	"	200
Monument Square	0.092	"	15,000
Mt. Vernon Park	0.50	"	4,350
North Common	11.39	"	100,000
Parker-Spalding Park	0.043	"	60
Pawtucket St. Park at Northern Canal	0.911	"	6,620
Penniman Square	0.051	"	450
Princeton Square	0.028	"	150
Raven Road Park	0.083	"	180
Riverside Park	0.105	"	184
Rogers Fort Hill Park	34.40	"	150,000
Shedd Playground	56.00	"	50,000
South Common	22.48	"	200,000
Tyler Park	1.81	"	8,000
Varnum Avenue Parkway	1.018	"	5,150
Varnum Park	0.136	"	6,000
Water Works Square	0.047	"	500
Wyman Park	5.22	"	2,088
Total	149.255	"	\$703,419

*Held by the Chairman of the Park Commission and the Mayor as Trustees, not under the direct charge of the Park Commission.



CHILDREN OF THE HOWARD STREET PLAYGROUND



GAMES ON THE HOWARD STREET PLAYGROUND

Report of the Board of Park Commissioners For the Year 1920

The Board of Park Commissioners presents, herewith, its report for the year 1920:

In many respects this has been one of the most important years in the development of the park and recreation systems of Lowell that we have known. It has seen for the first time the use of the Municipal Bath House to its full extent and it has witnessed a very important advance in efficiency in the system of playgrounds. It has also witnessed the completion of the Comfort Station on the South Common and the acquisition and improvement of a considerable part of the Pawtucketville parkway.

Almost equally gratifying has been the greatly increased public interest shown in the recreational features of our city. This has been evidenced by the activities of the Chamber of Commerce and Rotary Club in assisting in the operation of street playgrounds as well as in the continuous interest of the Committee on Parks and Playgrounds of the Chamber of Commerce and the formation of an important committee on Playground Sites

in Lowell Community Service. This assistance from so many public-spirited citizens is deeply appreciated by the members of the Board and the latter feel that the work in the city will progress more rapidly because of a continuation of such interest.

During the year several projects relating to the future development of the park and playground system of the city have received constantly increasing attention. It is evident that the great majority of our citizens emphatically desire that the First Street Oval should be purchased and made a permanent playground near the heart of the city. It is also true that an increasing number of tax payers are seeing the necessity for the purchase of Washington Park before it becomes built up as a tenement district. This piece of land is in the heart of one of the most congested areas and it is the only public breathing space for the future in that district. It would be a calamity to the people of the vicinity should it be lost for park purposes and instead add to the congestion already existing. For many years there has been an insistent demand that the great district of the Highlands should have a playground and breathing space. This region geographically includes nearly one-half of the city, and there is practically no playground in the whole region. The Board earnestly recommends the purchase of a piece of land along B Street which is now available and which would furnish a splendid opportunity for a ball field and playground to a large proportion of the children and youth of the city.

All three of these projects are so important that the Board finds it difficult to choose between them, and it rec-

ommends that bonds be issued for the purchase of all three at the earliest possible moment.

The Municipal Bath House has been one of the most successful recreation projects which the city has ever undertaken. The patronage has been so large that the facilities have been taxed to their utmost, and on many occasions found far from sufficient. Consequently, the Board recommends that the men's end be considerably extended in order to accommodate one hundred more locker-compartments as well as the erection of two small inclosures for the use of boys on one side and girls on the other. The latter is a suggestion from His Honor, Mayor Perry D. Thompson, in the wisdom of which the Board heartily concurs.

In last year's report we expressed the hope that the co-operation of the School Department could be brought about so that young people in the playgrounds should be offered work in Manual Training and Domestic Arts part of the time. This project was very successfully carried out during the summer in the Greenhalge School and the move proved so useful that it is hoped that the work may be extended the coming year into other school houses.

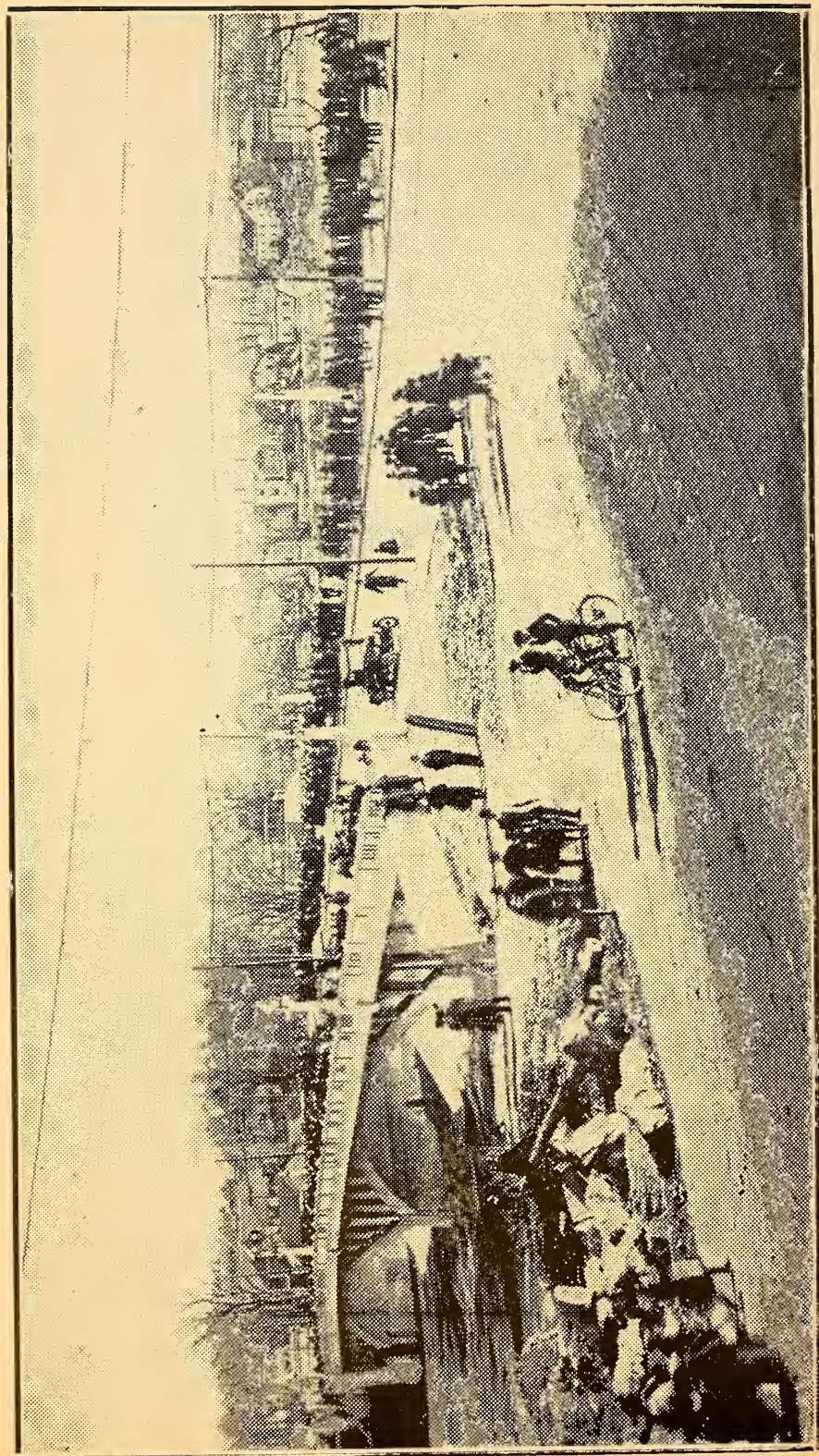
The city has been deeply indebted to National Community Service for the very efficient assistance of Miss Louise French, playground expert, who took charge of the playgrounds during the earlier weeks of the summer, and who was furnished to the city without cost by National headquarters. She proved herself an enthusiastic and inspiring leader, and she showed to the playground teachers new possibilities in their work. We also wish to

express our obligations for similar assistance to Mrs. Julian B. Keyes.

The Board also wishes to express its renewed appreciation of the splendid work done by the superintendent, playground supervisors and the other employees of the Department in obtaining results by their constant and faithful service.

Respectfully submitted,

CLARENCE M. WEED,
Chairman.



EARLY SPRINGTIME AT BRIDGEHEAD, PAWTUCKETVILLE SQUARE

Superintendent's Report

To the Board of Park Commissioners.

GENTLEMEN :—

I herewith most respectfully submit my annual report of the work done under your direction in the park system for the year ending December 31, 1920.

To me it has been a very busy year, and it is with some satisfaction and pride that I point to the fact that practically all the work outlined by your honorable Board has been accomplished.

Economy and close supervision of maintenance costs is always practised, but these costs are increasing each year, owing to the added facilities for use and enjoyment, and the very much greater number of people who resort to our parks for rest and recreation.

Parks are an essential feature of the modern city, and not only parks but a park system; not only a park system, but a system that studies the beauty of surroundings, the health of the people, the plays of the young, the proportions of recreation space, the changes of the seasons, the charm of landscape, the grace of architecture, the love and lore of nature, the lure of the wild and the beck of culture.

The park system of a modern city is not only a series of grounds dedicated to park purposes but a related and connected plan in which all the members are articulated into one unit. The park system of a modern city not only concerns itself that every neighborhood shall have its appropriate ornaments of lawns and shrubbery and glimpses of loveliness; but also that all these elements shall compose parts of one harmonious whole. The park system of a modern city not only aims at beauty, but strives to express the concept of the soul of the city. The parks of a modern city bear witness that its people are members of one great family. They are the concrete expression of civic consciousness in its highest visible form.

The privilege therefore of discharging this trust rests not only on those who have been appointed to administer the funds and enlarge and beautify the property, but involves as well, the zealous co-operation of every resident.

In taking account of the progress that has been made towards this complete system, it is a pleasure to record the fulness of such co-operation, by liberal meeting of views, by the courtesies of those engaged in other branches of the city government, and by the patriotic impulse of all the people, young and old, to care for their part as their own so that with the fewest possible restrictions, they may be enjoyed by all.

It should be our purpose to foster this spirit in every way—for when every child is imbued with the thought that he is to share in preserving order, to keep intact as something sacred, the things that belong to us all, a les-

son in citizenship has been thoroughly learned that goes to the very heart of preserving and enriching our institutions of self-government.

During the winter months we gave our attention to the upkeep of Shedd Pond for skating which once more proved a source of attraction for the children of nearly every quarter of the city. The sport was not of as long duration as in previous years owing to the severity of the weather, but did give an opportunity (which was perfectly safe) for healthy out-door exercise.

Early in the year the Board called for bidders for a new Comfort Station on the South Common, which has been a crying need for a number of years, and after a canvas of same awarded the job to Mr. Frederick H. Meloy for \$7895, and the plumbing to Farrell & Conaton for \$1645. Many difficulties were encountered by the contractors in the construction of the station, not only in finding a suitable foundation at the spot selected, but also in the prevailing building conditions. These, to our dismay, prevented us from opening the station the past summer as was intended. However, it is now finally completed and we look forward to opening it in the spring, and are confident it will improve conditions about the South Common.

In February many residents of Pawtucketville appeared before the Board declaring that their section of the city had been neglected for many years in the march of public improvements, so much so that they had no hesitancy in coming forward and urging that the park area at the end of the bridge be made presentable, and a proper spot selected for the locating of a proposed me-

monial to Pawtucketville men and women who served in the great World War. The Board assured them that they had not been dormant in the matter, but on the other hand were very much awake, and that during the building of the new bridge they had made a study of the adjacent riverbank for parkway development. Plans were made in 1917 calling for a general treatment of the riverbank from Moody Street to the entrance of the boulevard. Failure to secure the necessary funds was the only reason offered for the delay in going ahead. It was finally agreed at the conference that the Board ask His Honor the Mayor, and Municipal Council for a hearing on the project. This was accordingly done. March 23 was set as the date, and I, together with the Board, appeared before the Council. We were supplemented by a number of citizens from Pawtucketville and all stressed the importance of the work. A plan was presented, approved by the Board, as well as an estimate calling for the expenditure of \$50,000 for the development of the riverbank from Moody Street to the entrance of the boulevard which entailed the razing of several old dilapidated buildings on Riverside Street. The Municipal Council finally decreed that the finances of the city would not permit all of the work to be done this year, but did, during the summer, appropriate \$12,000 by a bond issue, for a beginning. Work was started at once on the project, and as \$4000 of this amount was utilized in seizing one piece of property, the Board spent approximately \$2000 from their regular funds, so that a respectable showing might be made for a few hundred feet each side of the bridgehead. Favorable comment has been heard



SCENE AT PUBLIC BATH HOUSE

on the work thus far executed, and it is hoped that an additional appropriation may be made the coming year to carry it on.

Our new Public Bath House on the boulevard was opened June 16 and it proved to be a very popular place. Many times during the summer it was taxed to much more than its capacity. The lockers were built large enough for two persons, but during the rush hours they were often found to contain five and six. The bathers were not only quite willing, but anxious, to crowd in in this manner rather than to be denied the opportunity of enjoying a plunge in the cooling water. The bath house was operated with six attendants during the summer, and our receipts nearly equalled the cost of maintenance. The river side of the Bath House was improved quite materially by spreading a layer of coarse sand six inches deep from the Bath House to the water's edge giving the appearance of a natural beach. From our experience last season, the wings of the Bath House should be extended, thereby relieving the congestion and affording the patrons more privacy and comfort. This would be especially true when hot days bring hundreds of people to the Bath House at the same time.

Our customary July 4th celebration which is in itself a novelty in this part of New England, was staged again last summer on the South Common and brought forth venders for many miles around as well as the usual number of merry-go-rounds. Many of our town's people opened booths of one kind or another, and all seemed to do a thriving business. The general order on the mid-way was good. The department's receipts from these

venders amounted to \$2307. In the way of athletic games the Board staged a 10-mile road race around the North Common in the afternoon. This contest was a handicap affair and attracted several thousand spectators. In the evening, His Honor the Mayor, provided a band concert as well as a magnificent display of fireworks. This was enjoyed by thousands of people and very favorably received. The evening was perfect for a pyrotechnical display, the hill at the southwesterly corner being the setting, and looking from a vantage point over the Common one could see a moving mass of humanity and firmly believe that every one in Lowell was present. Because of the great throng of people who frequented the Common during the Fourth, His Honor the Mayor provided two emergency tents on the Summer Street side, with nurses in attendance, who more than proved their worth. Fifty cases of accidents and illness were given first aid treatment, and the tents served also as a haven for lost children who were picked up in various parts of the Common having become separated from their parents.

Late in the fall, work was started on a few tennis courts at Fort Hill Park, the surroundings of which were to be properly landscaped by shrubbery. The Board felt they were taking a step in the right direction, both in introducing the game and the selection of the spot. As a result, the neighbors of that locality petitioned the Board for a hearing, as they desired to protest. A hearing was duly granted. After a thorough discussion of the case the Board decided to abandon the site chosen, and selected a spot at Shedd Park near the corner of Rogers and

Boylston Streets. Rough grading has been done and we expect to complete the work in the early spring.

MOVING PICTURES

Municipal movies proved once more a popular form of entertainment during the summer and we gave three shows a week for thirteen weeks. Some evenings the pictures were witnessed by as many as ten thousand people. Dramas, scenes of travel, comedies, intermingled with educational films and topics of general interest were presented at each performance, lasting about two hours. The pictures were obtained from the Community Motion Picture Bureau and were shown Tuesdays at the South Common, Wednesdays at the North Common, and Thursdays at the Lawrence Mfg. Co. Playground. We were extremely fortunate in the weather conditions, having missed but one night by reason of rain. A graphoscope machine was purchased, instead of renting one as in the past. It is light weight, being more easily handled, and thus far we have encountered no difficulty.

CHRISTMAS TREE

Our Yuletide observance this year followed along the lines of last. A huge spruce tree sixty feet in height, was brought in from the country and set up in front of City Hall. The tree was lighted Christmas Eve as soon as darkness stole over the city, and was all aglow with many different colored lights. The windows of the Municipal Building beamed with hundreds of candles, and beneath each window hung a wreath of laurel. In

connection with this municipal observance the Committee on Music of Lowell Community Service of which Miss Inez Field Damon is Chairman, had arranged with many choirs and other groups of singers to have Christmas carols sung throughout the city. This carol singing began about ten o'clock and at 11.30 the singers came to the Municipal Christmas Tree where they assisted the singing of carols along with some five thousand others under the leadership of Albert Edmund Brown, assisted by the U. S. Cartridge Shop Band. His Honor Mayor Perry D. Thompson, extended Christmas Greetings to all and the festivities came to a close. The tree was kept lighted from Christmas Eve until the New Year, and won the admiration of all. On New Year Eve at 5 p. m. the school children gathered about the tree and sang carols under the leadership of Mr. Fred. O. Blunt, with a band accompanying. His Honor the Mayor once again extended the greetings of the season to the school children and all departed very happy, with good resolutions for the coming year.

PLAYGROUNDS

Over 30 years ago the playgrounds movement started in America, but the last ten years has seen its greatest advancement. At first the Playgrounds were used chiefly during vacations, but now the demand for them is necessitating their prolonged use. In many cities because of the extra hours of leisure owing to the shortening hours of labor, they are operated all the year round, and the public school houses are thrown open evenings as recreation centres.



"SPORTS," CLOSING DAY EXERCISES, SUMMER PLAYGROUNDS



"SPORTS," CLOSING DAY EXERCISES, SUMMER PLAYGROUNDS

As the movement grows it usually extends the scope of its activities to include the play and recreation of the whole community. Modern cities are learning that it does not pay to have our recreations all commercialized and run to make money instead of better citizens.

The success of a playground depends largely on two factors, the facilities and equipment, and the supervision. Most of our playgrounds have very limited facilities and equipment, but this disadvantage is somewhat overshadowed by efficient leadership and direction. A playground is what those in charge make it, and the degree of service rendered depends upon the amount of energy, initiative and interest that the employees put into their work.

The earnest co-operation of the employees and the effective work of the supervisors in organizing teams, teaching gymnastics, athletics and games, and promoting play in all its aspects, sometimes under discouraging circumstances, has added materially to the usefulness of the playgrounds. The police officers on the beat of the respective grounds also render a valuable service in establishing a feeling of safety and confidence, and in maintaining proper order and discipline.

One of the most effective means of stimulating interest in the activities of the playgrounds has been the awarding of what is known as the Athletic Badge Test which was tried out for the first time last summer. Small bronze buttons bearing three different designs marking three different degrees in excellence for performing three different standards of tests in athletics were awarded.

The first test was in recognition of a child's ability to perform certain prescribed athletic feats in a certain time or distance, a standard being set. If they could perform the same test in better time or distance, a standard being set, they were entitled to a bronze button of the second class; and if they could do still better with still a higher standard being set, they were awarded a button of the third class.

Although the buttons were inexpensive, they were hard to secure, and every child who was fortunate enough to win one was extremely proud of their accomplishment, and most of those who failed to qualify worked diligently preparing for the next opportunity to secure one. The different tests were held throughout the summer and the buttons were formally presented at the closing day exercises by the Chairman of the Board.

Our five playgrounds opened on July 7, and continued for a period of eight weeks. It is a pleasure to report that the school department co-operated with us during the summer, furnishing two instructors, one in industrial work for the boys, and one in cooking for the girls at the Greenhalge School in West Centralville. Excellent results were obtained, and commendation is due them for their work. It is confidently hoped that this phase of our work may be extended to other school buildings adjacent to our grounds during this coming summer, so that the children of all sections of the city may have an equal opportunity.

We were extremely fortunate the past summer in having an expert in organized play assigned to us through the co-operation of Lowell Community Service,



CLOSING DAY EXERCISES, SUMMER PLAYGROUNDS



CHAIRMAN WEED PRESENTING ATHLETIC TEST BADGES,
CLOSING DAY EXERCISES, SUMMER PLAYGROUNDS

free of cost, in the person of Miss Louise E. French. The supervisors were called together each week and discussed problems which arose on their respective grounds, and then they were given a talk by Miss French on modern methods of play. During the week Miss French visited the different grounds and aided and assisted the supervisors wherever she could.

The usual amount of industrial work in the line of sewing was again taken up during the season and filled a gap for those children who didn't care about play. They busied themselves by making many useful articles for their home, and in many cases made wearing apparel for themselves when school opened. We are indebted to the mill agents of the city who responded generously by donations of cloth to carry on this work.

On Saturday afternoons a group of young ladies from Lowell Community Service, conducted a series of picnics, out in the country, for the playground children of our several different grounds. The children were transported by auto trucks and were given an opportunity to see a real up-to-date farm, as well as to roam about to enjoy nature in all its loveliness. They also took part in games, dances and community singing;—closing with a little spread in the form of ice cream and cake. The Community Service have our sincere thanks for their assistance, which proved very helpful to our playground work, and which was enjoyed immensely by the children themselves.

A new departure was undertaken this past summer in conjunction with the Chamber of Commerce, in operating street playgrounds during the evening until dusk.

It was financed by the Chamber of Commerce, and as problems are ever present, I gave my time that the children might have every pleasure in this new field of recreation, and at the same time be properly supervised. At first about six different congested streets were selected, but because of protest filed against some, only two were used, namely, the Charles Street and Howard Street. Streets were chosen because the regular day playgrounds were occupied by grown-ups who had toiled all day in the mills and were in need of exercise. It was thought best to keep the children's time occupied by wholesome organized play, thereby keeping them out of mischief, the new daylight law having given us an added hour of light each day. Other communities thought so well of it, that we had many inquiries as to our method and results. They certainly proved a success, even beyond our expectations.

Our closing exercises of the playgrounds were held on the South Common on September 2 with Mrs. Julian B. Keyes in charge. The co-operation between the different grounds stood out in evidence, as the program was excellent. The children worked as one group and their difficult dances gave pleasing results. In addition to their dances a simple bit of pageantry was given which met the hearty approval of all. The boys' program of sports which followed, stirred the friends of the competitors to a high pitch of enthusiasm. The final assembling of the various playgrounds on the field led to the presentation of the badges by Chairman Weed of the Board of Park Commissioners, to the girls and boys who had successfully passed the athletic tests of the American Play-

ground Association. The program closed with the salute to the flag, and singing of "The Star Spangled Banner."

STREET TREES

Our tree work the past year covered trimming trees, which means the removal of all dead and unsightly wood, all low overhanging branches which interfered with the proper use of streets and sidewalks, and those branches which were interfered with by the wire of the public service corporations. It covered the removal of dead, dangerous, and otherwise undesirable trees. Many trees of the latter class were removed where assurance was given that more desirable species would be planted. It also covered the planting of trees.

One or two improvement associations and still a larger number of citizens asked for advice and suggestions regarding the proper care and maintenance of the trees and shrubs growing in their particular locality which was always willingly and cheerfully given.

Many times during the year applicants desirous of having tree work done in front of their residences, would become a little restless because our tree gang would not show up the next day on the work asked for. Our policy has been to do the work in the order in which requests have been filed in our office, with the exception of an emergency job. We might, however, have three or four calls on one street, when these would be done the same day. There were weeks we had as many as thirty requests, some of which would take a good part of a day to complete. Hence one may see how progress at times seemed slow.

During the year we have trimmed over three hundred and twenty trees, and cut down one hundred and twelve. To offset this we have planted one hundred and sixty-five Young Norway Maples in different sections of the city, that we may not be on the losing end of the ledger at the end of the year. For the most part, streets were selected that were practically nude of trees. A few were planted on the South Common and at Fort Hill Park. Tree guards were placed about those we thought would have the hardest time to thrive, because of the molestation of mischievous persons.

RECOMMENDATIONS

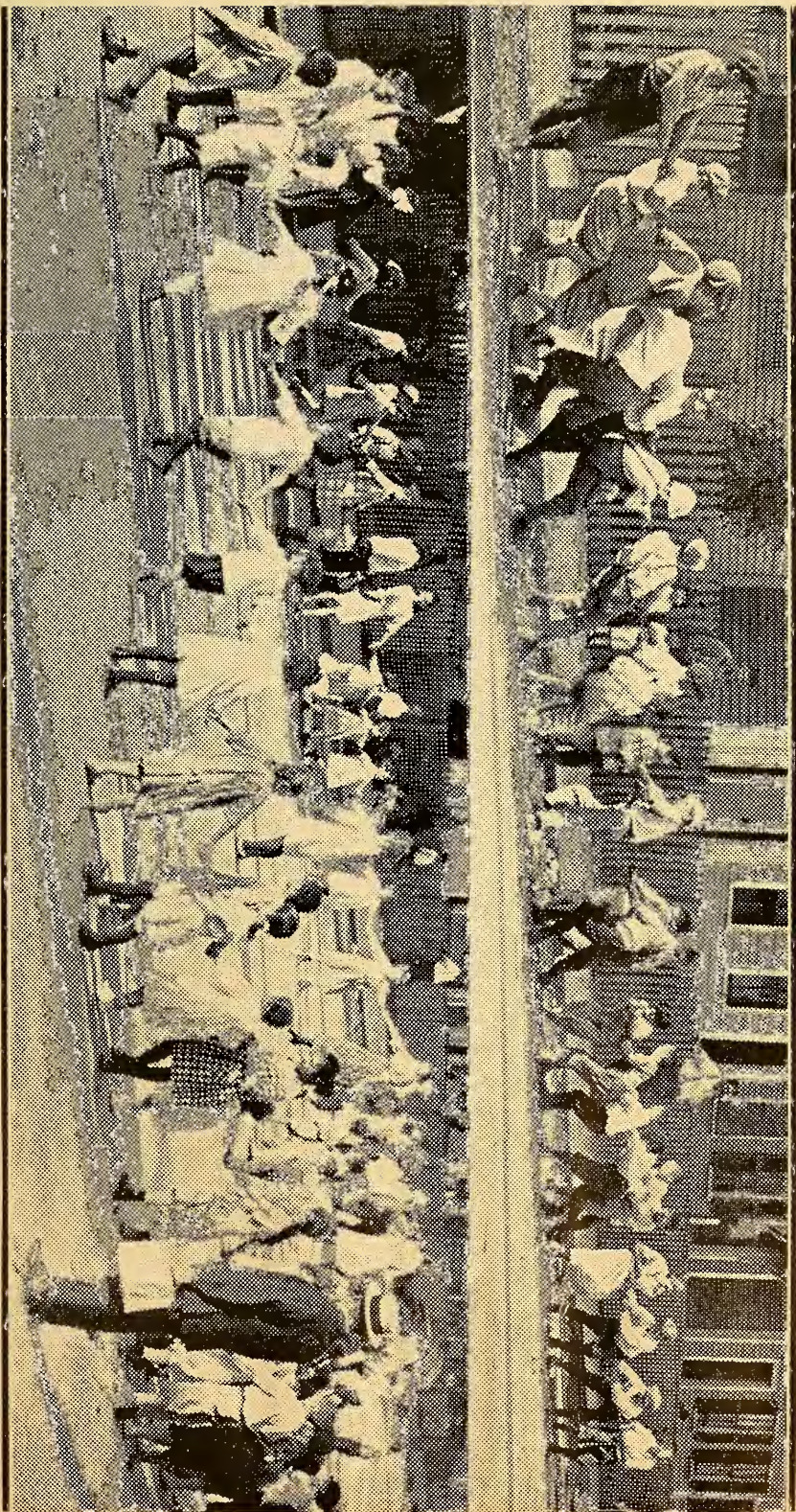
I respectfully recommend that the wings of the new public bath house on the boulevard be extended twenty feet on each end and additional locker accommodations built therein.

That the new parkway started last year at the bridgehead in Pawtucketville along the riverbank be continued insofar as funds will permit.

That an athletic field in the Highlands be purchased at once, as it may be obtained more reasonably now than later. Only a few desirable sites remain, and if building continues in the next few years as it has in the past, no land will be available.

That Washington Park be purchased as it will accommodate people in the Lower Highlands, and alleviate a very congested section.

That the policy of planting a few hundred street trees be continued each year so that our numbers will not be impaired in years to come.



GAMES AT CHARLES STREET PLAYGROUND

That an iron fence of an ornamental design be installed around the City Hall grounds, in place of the wire one now in use. A fence of some kind is an absolute necessity, as without one, we would have neither grass nor shrubs. I feel that the style of fence should be in keeping with the building and grounds.

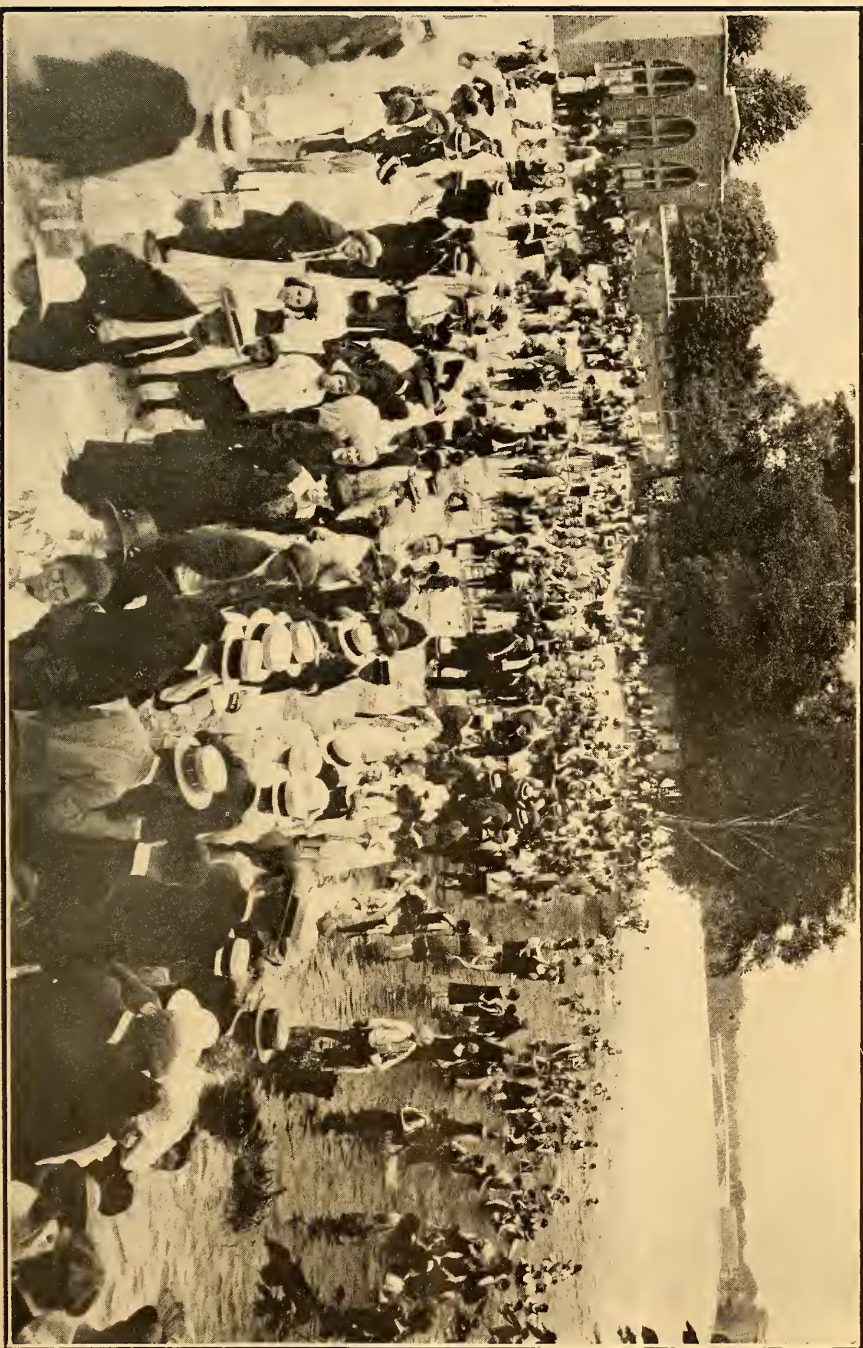
That the State authorities be urged to make some definite move toward the completion of the First Street Boulevard, as not until then can anything tangible be done on the proposed oval which we confidently hope will serve as a stadium for all athletic games, almost in the heart of the city.

So many improvements might be proposed to add beauty and utility to our existing parks, so many projects of park and driveway acquisition and improvement might be outlined, that it is rather difficult to refrain from recommending many things that are impossible to accomplish on account of existing financial conditions. However, recognizing these conditions, only those changes and improvements are recommended in the foregoing paragraph which are really necessary, and that can be accomplished, by a loan order of approximately \$50,000, and by which our annual appropriation for maintenance will not be impaired.

In conclusion permit me to thank the Board for its support given during the year, employees of the department for their faithfulness, the city officials, the playground teachers, the newspapers, and the public in general for the many kind favors rendered; and the spirit of co-operation that has been shown the past year.

Respectfully submitted,

JOHN WOODBURY KERNAN,
Engineer and Superintendent.



A HOT DAY AT PUBLIC BATH HOUSE

SEVENTY-SIXTH ANNUAL REPORT

OF THE

LOWELL CITY LIBRARY

THIRTY-FIRST REPORT

OF THE

LIBRARY TRUSTEES

OF THE CITY OF LOWELL
MASSACHUSETTS

FOR THE YEAR NINETEEN HUNDRED TWENTY



KILBURN PRINTING COMPANY

OLD GRIST MILL

1921

ADMINISTRATION OF THE LIBRARY 1920

Board of Trustees

HON. PERRY D. THOMPSON, MAYOR, *Ex-officio*

HUGH J. MOLLOY	Term expires 1921
ALEXIS E. BERTRAND, M. D.	" " 1922
HENRY H. HARRIS	" " 1923
JOHN T. DONEHUE, D. D. S.	" " 1924
EDWARD J. WELCH, M. D.	" " 1925

Organization

HON. PERRY D. THOMPSON, Chairman

JOHN T. DONEHUE, Vice-Chairman

FREDERICK A. CHASE, Clerk.

Librarian

FREDERICK A. CHASE

Asst. Librarian

ALICE M. MYERS

Assistants

DOROTHY P. WEBSTER

BLANCHE GRAY

ALICE L. DONEHUE

MARY E. DONOHUE

ANNETTE LEMAITRE

ROSE E. REILLY

Bindery

WALTER H. GILMAN

HARRY C. BOWEN

ROY FRENETTE

Superintendent of Reading Room

STEPHEN T. WYMAN

Librarian of Children's Room

LUETTA MARIN

REPORT OF THE TRUSTEES FOR 1920

To the Honorable, the Municipal Council of Lowell:

Gentlemen:—The Trustees of the City Library herewith present their annual report for the year 1920.

FINANCIAL STATEMENT

Receipts

Appropriation by Municipal Council	\$24,000.00	
Fines, etc.	817.05	
Transfers from John Davis Fund	3,967.01	
		\$28,784.06

Expenditures

Salaries	\$17,931.74	
Lighting	876.98	
Binding	1,304.19	
Periodicals	805.55	
Books	1,939.83	
Sundries—Printing	\$396.00	
Water Tax	47.50	
Express, etc.	177.66	
Supplies	428.35	
Postage	14.09	
Repairs	152.95	
Miscellaneous	248.70	
		\$ 1,465.25
Delivery Stations	493.51	
Expenses of Children's Room, Sunday opening and Books, etc., charged to Davis Fund	3,967.01	
		\$28,784.06

JOHN DAVIS FUND

Income for 1920

Cash on hand at last report	\$ 4,484.75	
Interest and dividend earnings on invest-		
ments and loans	4,648.52	
Rebate on Taxes	92.96	
	<hr/>	\$ 9,226.23

Expenditures

Expenses of Children's Room	\$ 690.26	
Expenses of Sunday opening	438.80	
Books purchased for the Library	2,837.95	
Liberty Loan Coupon Bond purchased		
(2d 4¼ \$6000)	5,258.25	
Cash on hand Jan. 1, 1921 .....	.97	
	<hr/>	\$ 9,226.23

JOHN DAVIS FUND

List of Securities

Bonds

Name	Due	Rate of Interest	Par Value
Boston & Maine R. R.	1944	4½%	11,000.00
Boston & Maine R. R.	1926	4 %	10,000.00
Boston & Maine R. R.	1929	4½%	5,000.00
N. Y., N. H. & H. R. R.	1954	4 %	10,000.00
Illinois Central R. R.	1952	3½%	10,000.00
Boston & Albany R. R.	1952	3½%	4,000.00
Atch., Top. & Sante Fe	1995	4 %	1,000.00
Hartford, Conn.	1923	4½%	10,000.00
City of Fall River	1926	4 %	4,000.00
City of Baltimore	1958	4 %	5,000.00
City of Waterbury, Conn.	1950	4¼%	4,000.00
Liberty Loan Coupon Bond	1938	4¼%	10,000.00
Liberty Loan Coupon Bond 2d	1942	4¼%	6,000.00
			<hr/>
			\$90,000.00

Railroad Stock

No. Shares	Name of Road	Price Per Share	Amount
41	Boston & Maine (Common)	24½	\$1,004.50
1	B and M. Preferred Stock (Class C)	38	38.00
39	Boston & Albany	126	4,914.00
1	Nashua & Lowell	125	125.00
			<hr/>
			\$6,142.50

Manufacturing Stock

No. Shares	Name of Company	Price Per Share	Amount
8	Lowell Bleachery	132	\$1,056.00

Miscellaneous Stock

12	American Tel. & Tel. Co.	100½	\$1,206.00
3	Lowell Gas Light Co.	150	450.00
			<hr/>
			\$1,656.00

Bank Stocks

No. Shares	Bank	Price Per Share	Amount
9	Appleton Nat. Bank, Lowell	120	\$1,080.00
3	Old Lowell Nat. Bank, Lowell	110	330.00
2	Wamesit Nat. Bank, Lowell	105	210.00
11	Union Nat. Bank, Lowell	225	2,475.00
10	First Nat. Bank of West Newton	170	1,700.00
			<hr/> \$5,795.00

Savings Bank Book

Bank	Book No.	Amount
Central Savings Bank	35073	\$ 221.83

Mortgage Note

A. H.	\$2,000.00
------------	------------

Summary of Investments and Cash Assets

	Val. Mar. 8, 1920	Val. Mar. 1, 1921	
Registered Bonds	\$84,000.00	\$90,000.00	\$6,000.00
Railroad Stocks	6,157.50	6,142.50	\$ 15.00
Manufacturing Stocks ..	1,240.00	1,056.00	184.00
Miscellaneous Stocks	1,644.00	1,656.00	12.00
Bank Stocks	5,671.00	5,795.00	124.00
Savings Bank Book	212.19	221.83	9.64
Mortgage Notes	2,000.00	2,000.00	
Cash in Bank	4,805.75	829.47	3,976.28
	<hr/> \$105,729.44	<hr/> \$107,700.80	<hr/> \$1,970.36 Net Increase

USE OF THE LIBRARY

The Circulation of books for the year showed an increase of 4,947 volumes over the previous year. The increase in the appropriation for the year barely kept pace with the increases voted for salaries and the amount available for the purchase of books remained about the same as in former years. Until provision is made for doing business on a much larger scale and for broadening the work of the library we must be content to serve the same public in about the same way that we have done for a number of years. Until an adequate system of branches is provided, an adequate amount for new books and for the greatly increasing need of books for the schools, we may not hope to compete in circulation with other Massachusetts cities of about the same size of Lowell.

EXHIBITIONS

Childhood II. French War Artists.

Colonial Houses. Boston Playgrounds. Masters of Color.

Sante Fe. Cathedrals of the World No. 2. French.

War XIV. Uniforms of the U. S. Army 1775-1918.

War VII. California. Warsaw.

CONDITION OF THE LIBRARY

New volumes purchased during the year	1,436
Volumes added by gift	21
Volumes added by binding periodicals	96
Duplicates purchased	1,181
Total number of volumes added	2,734
Total number of volumes in the Library	108,541
Periodicals and papers subscribed for	236
Periodicals and papers given	27
Number of volumes used, home and reference	165,043
Number of volumes consulted in the Reference Room	10,373
Magazines circulated	2,806
Library opened, days	303
Total circulation	165,043
Average daily circulation	544
Largest monthly circulation (November)	17,631
Smallest monthly circulation (August)	10,201
Largest daily circulation (December 11) ..	1,056
Smallest daily circulation (July 15)	96
Percentage of fiction read	80.4
Percentage of other classes	19.6
Children's Room circulation	38,670
Daily average	131

LIST OF DONORS 1920

	Vols.
American Tel. & Tel. Co.	1
American Walnut Mfrs. Asso.	1
Boughton, Mrs. M. A.	1
Brocton Committee on Public Safety	1
Chapman, Wm. Hall	1
Columbia Basin Survey Commission	1
Earl, E. C.	1
Fairchild Pub. Co.	1
Hill, E. C.	1
Hudson Bay Co.	1
Hussey, Rev. A. R.	59
Ingersoll, Robt. H. & Bro.	1
Korean Nat'l Asso.	1
Lowe, E. P., M. D.	1
Munsey, Frank A.	1
Nat'l Bank of Commerce	1
Nat'l Lutheran Commission	1
Nat'l Rivers & Harbors Congress	2
Old Colony Trust Co.	7
Phillipine Press Bureau	1
Pons, A. A.	1
Putnam, G. P. & Sons	6
Randlett, Mrs. O. B.	1

STATISTICS IN FORM ADOPTED BY THE AMERICAN LIBRARY ASSOCIATION

City Library, Lowell, Mass.

Annual Report for Year Ending December 31, 1920.

• Population, 1920 Census, 112,759.

Free for Lending and Reference.

Two delivery stations, namely one at Davis Square, one in Central-
ville and several deposit stations.

Main Library open 303 days during year. 66 hours a week for
lending. 72 hours for reading.

Library open Sundays (Oct. to June) for reference and reading
2 to 9 P. M.

Reading Room open Sundays, 9 A. M. to 9 P. M.

Volumes in Library, January 1, 1920	105,807
---	---------

Added by purchase	1,436
-------------------------	-------

Added by gift	21
---------------------	----

Volumes in Library, Dec. 31, 1920	108,541
---	---------

Volumes of fiction lent for home use:

Adult 91,124, Juvenile 29,774, Total	120,898
--	---------

Total volumes lent for home use:

Adults 113,092, Juvenile 38,670, Total	151,762
--	---------

2346 Borrowers registered during year. Registration period five
years.

263 Newspapers and Periodicals currently received.

New Registration with Five Year Limit.

Applicants received during the year	2,449
Applicants who did not call for cards	103
Number of names registered Dec. 31, 1920	32,186
Number of names registered Dec. 31, 1919	29,840
Total registered during the year	2,346



ANNUAL REPORT

OF THE

CITY SOLICITOR



FOR THE YEAR ENDING
DECEMBER 31, 1920



LOWELL, MASS.
BUCKLAND PRINTING COMPANY

REPORT

OFFICE OF CITY SOLICITOR
LOWELL, MASS.

August 1, 1921.

TO THE MUNICIPAL COUNCIL OF THE CITY OF LOWELL,

GENTLEMEN:

I herewith submit the following as the report of the law department for the year 1920.

Respectfully,

William D. Regan,
City Solicitor.

During the year 1920, the following cases were tried, determined and settled:

SUPREME JUDICIAL COURT

17078 *Charles E. Alway v. John F. Salmon et als.*

17077 *James E. Burns v. John F. Salmon et al.*

These were two petitions for writs of mandamus to command the defendants to recognize the petitioners as members of the fire department of the City of Lowell and to cease from interfering with said petitioners in the performance of their duties in said department.

The above matters were heard before Mr. Justice Pierce on April 1, 1920, who allowed the petitions. An agreement was filed with the court for the payment by the City of costs to the petitioners of the following sums, \$14.24 to said Alway and \$14.23 to said Burns.

Richard D. Kimball Company v. J. Joseph Hennessy.

This was a petition for a writ of mandamus to issue to command the City Auditor to pay to said petitioner the sum of \$6000. for work done in preparing plans, etc., for the new High School addition, said sum having been voted to be paid to said petitioner by the High School Building Commission.

Hearing was had on the above matter on December 14, 1920, before Judge Jenney in the Supreme Judicial Court. Judge Jenney dismissed the petition on the ground that it was a matter that should properly have been brought in the Superior Court.

SUPERIOR COURT

36931 *Joseph J. Sweeney v. City of Lowell.*

This was an action of tort brought in the Superior Court in the sum of one thousand dollars. The writ was dated April 14, 1920 and returnable to Superior Court the first Mon-

day of June, 1920. This action grew out of a claim for damages for injuries to a horse resulting in its death, alleged to have been received while same was being driven through Arcadia Avenue a private way in the City of Lowell, on March 4, 1920. This case was heard at the October, 1920, sitting of the Superior Court before Judge Bishop, with jury. The jury returned a verdict for the City.

CASES NOW PENDING

26300 *Edward D. Lyons v. City of Lowell.*
26302 *Lowell Trust Company v. Same.*

These are two separate actions of tort brought in Superior Court in the sum of five thousand dollars each for damage to property caused by broken water pipes in Central, Gorham and Middlesex Streets.

Both writs were dated January 25, 1915 and returnable the first Monday of March, 1915.

These actions were consolidated and referred to Gilbert A. A. Pevey as auditor. Hearings were begun before Mr. Pevey on July 2, 1919, and extended over four days. The auditor rendered his finding generally for the plaintiffs. A motion to recommit said report to the auditor was filed with the court and allowed.

The report was recommitted and a rehearing held thereon. Thereafter the auditor filed a supplementary report. The matter then went on for hearing before Keating, J., in the City of Lowell, who confirmed the auditor's report and reported the questions of law for consideration by the Supreme Court.

This case is now pending in the Supreme Court.

35707 *Apostolos A. Johnson and George E. Vozeolas v. City of Lowell.*

This is a petition for a jury to assess damages for the taking of land on the Old Ferry Road for water works purposes. The land was taken by the Municipal Council by order of taking dated May 27, 1919, awarding the sum of thirty-five hundred and fifty dollars to the petitioners, which amount said petitioners considered inadequate and refused to accept.

The petition was dated November 19, 1919, and returnable the first Monday of January, 1920.

Trial on the matter was held before Fosdick, J., sitting with jury at Lowell, on June 14, 15, and 16, 1920. The jury at the conclusion of the hearings found for the plaintiffs in the sum of \$7975.

Exceptions were filed September 1, 1920. The bill of exceptions was allowed and the matter is now pending in the Supreme Court.

32792 *Fred H. Rourke, Tax Collector, v. Frank Hanchett.*

This is an action of contract brought in Superior Court for Middlesex County in the sum of ten thousand dollars by Fred H. Rourke, treasurer and collector of taxes for the City of Lowell, to recover taxes due the City of Lowell from Frank Hanchett for the year 1916. The writ is dated March 30, 1918, and returnable to Superior Court the first Monday of May, 1918.

This case came on to be heard before Hammond, J., who found for the City in the sum of \$9283.17 with interest from the date of the writ. Exceptions were taken by the defendant and the defendant filed a motion for a new trial. On September 15, 1919, a motion to extend the time for filing exceptions was made and allowed.

Two hearings were had on the motion for a new trial before Hammond, J., which motion was finally disallowed, and the court thereafter filed a supplementary memorandum of findings in the case. The case is now pending in the Supreme Court.

SUPERIOR COURT

31995 *James C. Donovan v. City of Lowell.*

This is an action of tort brought in the Superior Court in the sum of three thousand dollars for damages to the plaintiff's property at the corner of Market and Palmer Streets, caused by the overflow of a city water main. The writ is dated May 3, 1917 and returnable the first Monday of July, 1917.

The case came on to be heard at the fall sitting of the Superior Court in Lowell. The City Solicitor moved that the matter be referred to an auditor, and G. A. A. Pevey of Cambridge was appointed by the Court to hear the parties, their witnesses, and examine their vouchers; his decision on the matter for damages to be final. Hearings were to commence on January 1, 1920, and to conclude on the first day of March, 1920. Several hearings were held before the auditor during 1920 in this matter. The Lowell Electric Light Corporation was summoned as a co-defendant with the City of Lowell. The auditor upon the conclusion of the hearings found against the Lowell Electric Light Corporation and for the City of Lowell. The case is now pending in the Superior Court.

21670 *Thomas Risten alias v. City of Lowell.*

(Essex)

This is an action of tort brought in Superior Court for Essex County in the sum of five hundred dollars. The writ

was dated January 13, 1920 and returnable the first Monday of March, 1920. This case grew out of alleged damage to an automobile owned and operated by the plaintiff on First Street, Lowell, on or about September 14, 1919.

36483 *Jerome P. Cullen v. City of Lowell.*

This is an action of contract brought in the sum of two thousand dollars. The writ was dated January 29, 1920 and returnable the first Monday of March, 1920. The plaintiff alleges having received injuries which incapacitated him for forty-three days, during which time his wages were withheld. This action was brought for the recovery of said wages. A special appearance and demurrer have been filed by the City.

22191 *Bruno Ferrini v. City of Lowell.*

(Essex)

This is an action of tort brought in the sum of four thousand dollars for mental and physical injuries sustained as the result of being thrown from a motor cycle which was being operated on Colonial Avenue on or about June 20, 1920 by the plaintiff, due to an alleged defect in said avenue.

The writ was dated July 9, 1920 and returnable the first Monday of September, 1920. A special appearance, answer and plea in abatement have been filed by the city.

31066 *Annie I. Young v. City of Lowell.*

This is an action of tort brought in the sum of two thousand dollars for alleged damage to plaintiff's property caused by the entry thereon of agents and servants of the City of Lowell.

The writ was dated April 5, 1917 and returnable to Superior Court the first Monday of June, 1917.

Appearance was duly entered by the city. Said appearance was returned with a memorandum stating that no entry of this action had been made. Late entry, of which the city was never notified, was allowed June 18, 1917. * Later an answer and a motion to remove the default against the city for non-appearance were filed. Said motion was allowed.

38410 *Mary Carey v. City of Lowell.*

This is an action of tort brought in the sum of three thousand dollars for alleged injuries sustained on or about November 20, 1919 while traveling on a sidewalk in Andrews Street.

The writ was dated November 16, 1920 and returnable to Superior Court the first Monday of January, 1921. In this matter a special appearance and answer have been filed by the city.

38595 *City of Lowell v. Mary H. Costello, Admx.*

This is an action of tort brought in the sum of ten thousand dollars by the city against Mary H. Costello, administratrix of the estate of Thomas F. Costello, for the failure to fulfill a certain contract for the construction and completion of a plumbing and gas piping system in the Morey School addition, entered into by and between Thomas F. Costello and the City of Lowell, dated August 25, 1919.

A writ dated October 2, 1920 and returnable to the Superior Court the first Monday of January, 1921, was entered, and a declaration filed by the City of Lowell.

38594 *City of Lowell v. Maryland Casualty Company.*

This is an action of tort brought in the sum of three thousand dollars against the defendant as surety on the bond of the late Thomas F. Costello, given as security for the faithful performance of a contract entered into by and between said Costello and the City of Lowell, dated August 25, 1919, for the completion and construction of a plumbing and gas piping

system in the addition to the Charles W. Morey School. The writ was entered and declaration filed. The writ was dated October 22, 1920 and returnable the first Monday of January, 1921.

37532 *James J. Healey v. City of Lowell.*

This is an action of tort brought in the sum of one thousand dollars by the plaintiff to recover for personal injuries alleged to have been sustained on or about March 31, 1920, while traveling along the sidewalk on Lincoln Street.

The writ was dated July 16, 1920 and returnable the first Monday of September, 1920.

A special appearance and answer have been filed in this matter by the city.

36011 *Donald W. McKenzie and Sam Asquith v. City of Lowell.*

This is an action of tort brought in the Superior Court for Middlesex County in the sum of five thousand dollars to recover for the loss of groceries stored in the cellar of the plaintiffs, due to the alleged backing up of the Church Street sewer on or about January 30, 1919. The writ was dated November 19, 1919 and was returnable the first Monday of January, 1920.

In this matter a special appearance was filed. In due course an answer and motion for specifications were filed.

The matter is now pending in the Superior Court.

POLICE COURT

Rose A. Dowd v. City of Lowell.

This is an action of tort growing out of an alleged injury to a hot water boiler, alleged to have been caused by the shutting off of the water to plaintiff's house without notification from the Water Works Department, and is brought in the sum of three hundred dollars.

The writ is dated April 26, 1920 and is returnable the first Saturday of June, 1920. An appearance and answer have been filed by the defendant and the matter is now pending in the Police Court.

WORKMEN'S COMPENSATION

In 1920, twenty-three accidents to employees of the city were reported to the law department and investigated by said department. Compensation was allowed and paid to eighteen of said employees, two of whom were allowed additional compensation,—one for the loss of the first phalange on the large finger of the left hand, and the other for the loss of sight in the right eye.

The payment of compensation was continued to eight other employees who were injured in previous years.

One hearing before a member of the Industrial Accident Board was held in 1920. This was in the matter of John B. Riley who was injured January 2, 1920, while at work for the department of public property in the mayor's office. He was allowed fifty-four days' compensation, amounting to \$146.28.

The accidents were distributed among the various departments, as follows:

Streets and Highways	12
Water Works	4
Health	4
Public Property	3
	<hr/>
	23

The total amount of money expended in the appropriation for Workmen's Compensation during the year was \$5526.00, as against an expenditure of \$4734.37 in 1919. Of this amount,

\$4928.96 was spent for wages, \$590.79 for medical and hospital services, and \$6.25 for printing.

During the year 1920 no change was made in the following cases which are still pending:

3032	<i>Bragg Mfg. Co. vs. City of Lowell.</i>
274	<i>Peter Curran vs. City of Lowell.</i>
19073	<i>Winifred Radigan vs. City of Lowell.</i>
882	<i>Hassam Paving Co. vs. City of Lowell (U. S. Ct.)</i>
1992	
	<i>Grade Crossings (1910-Equity.)</i>
1957	
2402	<i>R. C. Maxwell vs. James E. O'Donnell et al.</i>
2552	<i>Thos. F. Carroll et als vs. John B. Clancy.</i>
28322	<i>Susan F. Taylor vs. City of Lowell.</i>
26498	<i>Dennis J. Cooney vs. City of Lowell.</i>
30661	<i>Margaret W. Merrill vs. City of Lowell.</i>
29009	<i>George C. Dempsey et al vs. City of Lowell.</i>
29008	<i>George C. Dempsey et al vs. City of Lowell.</i>
28891	<i>Margaret W. Merrill vs. City of Lowell.</i>
28892	<i>P. Dempsey & Co. vs. City of Lowell.</i>
27988	<i>Ida C. Braun vs. City of Lowell.</i>
27985	<i>Elizabeth J. Shunny vs. City of Lowell.</i>
28003	<i>James Crompton vs. City of Lowell.</i>
27992	<i>Lowell Day Nursery Association vs. City of Lowell.</i>
27987	<i>Almira Chapman vs. City of Lowell.</i>
27997	<i>Joseph Gagnon et al vs. City of Lowell.</i>

Benjamin F. Nichols et al vs. City of Lowell.

28896 *Frank Malloreys vs. City of Lowell.*

31404 *John H. Rigg, Admr. vs. City of Lowell.*

32376 *Julia E. Cote vs. City of Lowell.*

32521 *Alice A. Bagley vs. City of Lowell.*

74 *Leo O'Neil vs. City of Lowell.*

590 *Sophia Hall vs. City of Lowell.*

301 *George H. Jones vs. City of Lowell.*

387 *City of Lowell vs. H. D. Oliver.*

6838 *John J. McMahon vs. City of Lowell.*

207 *Amedee Archambault vs. City of Lowell.*

Written opinions rendered by the City Solicitor during the year 1920:

Jan. 2. MUNICIPAL COUNCIL: Relative to an audit of the accounts of the Water Works Department.

Jan. 21. BOARD OF PARK COMMISSIONERS: Relative to the use of the South Common for the erection of a temporary building.

Jan. 24. HIGH SCHOOL BUILDING COMMISSION: As to the right of the Commission to execute a cost-plus contract for the construction of a new High School.

Jan. 26. PERRY D. THOMPSON: Relative to locating an evangelical temple on the site of the proposed memorial auditorium.

Mar. 2. J. JOSEPH HENNESSY: Relative to the au-

thority of the city to appropriate \$2500. for a fitting observance of Memorial Day.

Mar. 9. JOHN H. LAMBERT: Relative to the liability of the City of Lowell to Henry L. Rourke as architect for the construction of the addition to the High School.

Mar. 12. PERRY D. THOMPSON: As to authority of the Commissioner of Water Works and Fire Protection to discontinue any specific fire station or engine house in Lowell.

Mar. 15. GEORGE E. MARCHAND: Relative to the plumbing contract for the new Morey School addition signed by Thomas F. Costello.

Mar. 16. PERRY D. THOMPSON: Relative to the term of office of a person to be elected to the Board of Election Commissioners of the City of Lowell on April 1, 1920.

Mar. 20. JOHN H. LAMBERT: Relative to the Richard D. Kimball Company contract for engineering services in the construction of the new High School.

Mar. 23. PERRY D. THOMPSON: Relative to the term of an officer to be elected by the Municipal Council for and under the provisions of section 2, chapter 154, Special Acts 1920.

Mar. 23. PERRY D. THOMPSON: Relative to the status of Omer J. Allard as a registrar of voters.

Mar. 25. REDMOND WELCH: Relative to the length of time that a vehicle may be allowed to stand on Paige Street.

Mar. 29. HIGH SCHOOL BUILDING COMMISSION: Relative to the liability of the City to pay Henry L. Rourke

extra compensation for changes in plans and specifications for new High School.

Mar. 30. HIGH SCHOOL BUILDING COMMISSION: Relative to the power of the Commission to direct the City Treasurer in carrying the funds received and expended by the Commission.

Mar. 31. STEPHEN FLYNN: Relative to the duties of the City Clerk under c. 154, special acts of 1920.

Apr. 6. EDWARD H. FOYE: Relative to the right of the purchasing agent to purchase in the market supplies for which immediate delivery is imperative when a contract is pending for like supplies.

Apr. 7. J. JOSEPH HENNESSY: Relative to the salary of the superintendent of schools and the right of the school committee to make the same retroactive.

Apr. 7. WILLIAM H. MAHAN: Relative to the proper person to enforce section 5 of chapter 296 of the general acts of the year 1915, regarding licenses for electricians.

Apr. 10. GEORGE E. MARCHAND: Relative to the proposed ordinance concerning the control of building operation in the City of Lowell.

Apr. 22. MUNICIPAL COUNCIL: Relative to the petition of George H. Brown regarding the payment of moneys expended by him.

Apr. 26. DR. M. A. TIGHE: Relative to the examination of callmen for the permanent force by the city physician.

Apr. 30. BRITISH AND CANADIAN WAR VETERANS' ASSOCIATION: Relative to the payment of a poll tax of \$5 by Canadian War Veterans who are residents of Massachusetts.

May 10. J. JOSEPH HENNESSY: Relative to the right of the school committee to vote \$800. to defray the expense of school officials in the investigation of out of town schools, and the legality of said vote.

May '24. JOHN F. SALMON: Relative to the petition of William N. Flagg to be retired on pension.

June 5. WILLIAM H. RIGBY: As to whether the Board of Cemetery Commissioners can increase the prices charged for the care of lots in the public cemeteries.

July 29. LICENSE COMMISSION: Relative to the licensing of a dance hall on the Pawtucket Boulevard.

Aug. 10. JOHN W. KERNAN: Relative to the liability imposed upon the city by the granting of a concession at the new public bath house.

Aug. 10. J. JOSEPH HENNESSY: Relative to the issuing of drafts for the payment of bills contracted by the city.

Aug. 10. WILLIAM H. RIGBY: Relative to the right of the Cemetery Commissioners to control the investment of their perpetual care fund.

Nov. 10. BOARD OF PARK COMMISSIONERS: Whether or not the Board of Park Commissioners has the right to sell the Fayette School property.

Nov. 11. BOARD OF PARK COMMISSIONERS: Regarding the liability of the City of Lowell to answer in damages to Mary Fox.

Nov. 30. JOHN H. LAMBERT: Relative to the matter of sewer connections with the High School.

CITY SOLICITORS
1840-1918

Name	Date of Election	Term of Service
Thomas Hopkinson	April 7, 1840	
John A. Knowles	May 31, 1841	
Richard G. Colby	Apr. 13, 1842	
Seth Ames	Aug. 26, 1843	
Isaac S. Morse	July 31, 1849	
Theodore H. Sweetser	Jan. 3, 1853	
Arthur P. Bonney	Jan. 9, 1855	
Alpheus R. Brown	Jan. 8, 1856	
Robert R. Caverly	Jan. 12, 1857	
Alpheus R. Brown	Jan. 4, 1858	
Theodore H. Sweetser	Jan. 3, 1859	
Alpheus R. Brown	Jan. 6, 1862	Jan. 6, 1862 to Mar. 1, 1864
Tappan Wentworth	Feb. 23, 1864	Feb. 23, 1864 to Mar. 1, 1867
George Stevens	Jan. 7, 1867	Mar. 1, 1867 to Mar. 1, 1870
John F. McEvoy	Jan. 25, 1870	Mar. 1, 1870 to Mar. 1, 1872
Joshua N. Marshall	Jan. 1, 1872	Mar. 1, 1872 to Mar. 1, 1873
John F. McEvoy	Jan. 6, 1873	Mar. 1, 1873 to Mar. 1, 1875
George F. Richardson	Feb. 9, 1875	Mar. 1, 1875 to Mar. 1, 1880
George F. Lawton	Jan. 5, 1880	Mar. 1, 1880 to Mar. 1, 1883
Nathan D. Pratt	Jan. 1, 1883	Mar. 1, 1883 to Mar. 1, 1885
George F. Lawton	Jan. 5, 1885	Mar. 1, 1885 to Mar. 30, 1886
John J. Pickman	Apr. 6, 1886	Apr. 6, 1886 to Mar. 1, 1887
William F. Courtney	Jan. 14, 1887	Mar. 1, 1887 to Mar. 1, 1888
Frederic T. Greenhalge	Jan. 24, 1888	Mar. 1, 1888 to Mar. 1, 1889
Larkin T. Trull	Jan. 7, 1889	Mar. 1, 1889 to Mar. 1, 1891
John J. Hogan	Feb. 10, 1891	Mar. 1, 1891 to Aug. 5, 1895
Francis W. Qua	Aug. 1, 1895	Aug. 5, 1895 to Mar. 1, 1903
William A. Hogan	Jan. 6, 1903	Mar. 2, 1903 to Mar. 1, 1905
J. Gilbert Hill	Jan. 3, 1905	Mar. 1, 1905 to Mar. 1, 1909
William W. Duncan	Jan. 4, 1909	Mar. 1, 1909 to Jan. 2, 1912
J. Joseph Hennessy	Jan. 2, 1912	Jan. 2, 1912 to Feb. 15, 1916
Harold A. Varnum	Feb. 5, 1916	Feb. 5, 1916 to Jan. 30, 1917
William D. Regan	Feb. 9, 1917	Feb. 9, 1917 to

Respectfully submitted,

WILLIAM D. REGAN,
City Solicitor.

LIST OF JURORS

FOR THE
CITY OF LOWELL

FOR THE YEAR

1921



LIST OF JURORS

A

Abbott, James M., 24 Fairmount st., broker.
Abbott, Leon D., 5 Parkview ave., foreman.
Achin, Henry, Jr., 9 Plymouth st., insurance.
Achin, Victor, 749 Merrimack st., dealer.
Achin, Wilfred J., 42 Mt. Vernon, chauffeur.
Adams, John M., 54 Gates st., painter.
Adams, Smith J., 11 Gilbride terrace, salesman.
Adsit, Alvaro W., 228 East Merrimack st., second hand.
Ahearn, Joseph J., Jr., 16 Leroy st., blacksmith.
Alexander, J. Walter, 774 Moody st., clerk.
Allard, Henry, 3 Lilley ave., dealer.
Allard, Joseph J., 114 Ennell st., storekeeper.
Allen, Walter M. N., 39 Elliott st., machinst.
Anderson, August, 23 Lundberg st., operative.
Anderson, Charles E., 1386 Gorham st., molder.
Andrews, John A., rear 11 So. Whipple st., leatherworker.
Andrews, J. Munn, 256 Andover st., manufacturer.
Archambault, Amedee, 742 Merrimack st., undertaker.
Archambault, Henri A., 742 Merrimack st., undertaker.
Armistead, Robert R., 126 West Meadow rd., dealer.
Ashton, John T., 60 Orleans st., second hand.
Ashworth, James, 137 Stackpole st., gentleman.
Asquith, Sam, 36 Chatham st., merchant.
Asselin, Charles A., 148 Ennell st., electrician.
Atherton, Charles S., 12 Cheney pl., clerk.
Ayer, Lorenzo A., 557 Varnum ave., gardener.
Ayer, William A., 27 Varnum ave., plumber.
Ayotte, Edward, 83 Salem st., operative.

B

Batchelder, Mark O., 650 Stevens st., overseer.
Bagshaw, Walter H., Jr., 94 Fairmont st., manufacturer.
Balfrey, John, 65 Congress st., shoemaker.
Bancroft, Frank M., 7 Brookside st., motorman.
Banks, Isaac, 133 Howard st., operative.
Barker, Edgar H., 9 Mt. Hope st., instructor.
Barlofsky, Archie, 135 Howard st., clerk.
Barnes, Henry W., 30 Huntington st., banker.
Barber, Jesse, 8-76 Congress st., bleachery.
Barber, Joseph, 252 Pawtucket st., manufacturer.
Barrett, Andrew E., 77 Mt. Vernon st., merchant.
Barry, Henry, 147 Hildreth st., operative.
Barry, Patrick H., 13 Sycamore st., watchman.
Barry, John H., 15 Lombard st., plumber.
Barry, George, 20 Lombard st., machinist.
Barry, William A., 34 Laurel st., clerk.
Barry, William J., 4 Hanks st., manufacturer.
Basnett, George B., 625 East Merrimack st., barber.
Bassett, Cyrus R., 32 Meadowcroft st., U. S. C. Co.
Bean, Ralph M., 15 Eighth ave., secretary.
Beane, George L., 181 Mt. Vernon st., operator.
Beane, Thomas J., 104 Pleasant st., life insurance.
Beaudry, Francois, 111 Fulton st., teamster.
Beaulieu, John H., 202 Hildreth st., dealer.
Beaumier, Joseph, 11 Second st., clerk.
Beauregard, Oliver J., 868 Moody st., clerk.
Beauregard, Wilfred A., 105 Crawford st., contractor.
Beck, Edmund, 107 Warwick st., laborer.
Belanger, Clovis, 768 Merrimack st., solicitor.
Bell, Frank A., 19 Wachusett st., machinist.
Bellefontaine, Miller, 130 Riverside st., furniture dealer.
Beharrell, Joseph R., 114 Wentworth ave., carpenter.
Berard, Adelard, 577 Middlesex st., expressman.
Bergeron, Albert, 35 Mt. Vernon st., real estate.
Bergeron, Philippe O., 825 Merrimack st., musician.
Bernard, George, 2 Montcalm ave., dealer.
Bernier, Arthur J., 265 West 6th st., clerk.
Bernston, Olaf A., 121 Moore st., dealer.
Bernier, Samuel J., 22 Rockdale ave., clerk.
Best, Arthur H., 42 B st., J. C. Ayer Co.

Bibeault, Alfred W., 135 Liberty st., operative.
Bibeault, Alphonse, 21 Wilder ave., stone cutter.
Billingsley, Fred, 320 Wentworth ave., dealer.
Bishop, Herbert L., 28 May st., paymaster.
Bishop, Warren A., 123 Agawam st., R. R.
Bissonnette, Henry, 97 Aiken ave., dealer.
Bissonnette, John, 47 Mt. Washington st., painter.
Bissonnette, Zephyrin J., 300 Varnum ave., telegrapher.
Bilodeau, Napoleon J., 713 Merrimack st., undertaker.
Bixby, Albert H., 24 Marlboro st., salesman.
Blanchette, Tancrede L., 32 Decatur st., clerk.
Blazon, Donat, 131 Gershom ave., printer.
Blodgett, Emery F., 585 Chelmsford st., bookkeeper.
Blood, Cyrus F., 222 High st., clerk.
Blowen, Herbert, 25 Harrison st., ice cream maker.
Boardman, Edward, 467 Merrimack st., dealer.
Boardman, J. Harry, 107 Clark rd., banker.
Bolan, Edward S., Jr., 53 Shaffer st., barber.
Boland, James J., 210 Appleton st., manager.
Boland, James J., Jr., 210 Appleton st., merchant.
Bonin, Honore, 90 Aiken st., barber.
Bordeleau, Emile, 865 Mooday st., salesman.
Boucher, George H., 125 Dalton st., dealer.
Boudreau, Frank M., 722 Moody st., clerk.
Boudreau, John B., 53 Mt. Hope st., grocer.
Boughton, John L., 146 Chelmsford st., laborer.
Boulais, Arthur N., 8 Dracut st., clerk.
Boulais, Henri J., 8 Dracut st., clerk.
Boule, Lazare, 538 Moody st., operative.
Boulger, John B., 835 Moody st., merchant.
Bourdon, Michael, 805 Merrimack st., carpenter.
Bourgeois, Gustave M., 62 Mt. Hope st., clerk.
Bourque, Philip R., 19 Lombard st., carpenter.
Bourret, Charles E., 910 Lakeview ave., plumber.
Bowles, Willis J., 244 W. Sixth st., operative.
Box, John W., 7 Lyons st., beltmaker.
Boyd, Joseph F., 21 Chestnut sq., manager.
Branchaud, Alberic A., 15 Dana st., manager.
Branchaud, Charles E., 9 Somerset st., clerk.
Brantigan, Willie, 9 Rockdale ave., operative.
Bray, George, 341 Lakeview ave., merchant.

Bray, Richard, 23 Belrose ave., master mechanic.
Brassard, Maurice, 4 Butterfield st., clerk.
Brassard, Henry J., 68 Mt. Hope st., chauffeur.
Brault, Aristide, 18 Cambridge st., packer.
Breen, John P., 9 Lyons st., Loomfixer
Breen, Stephen D., 57 Crawford st., ins. agent.
Brennan, George F., 31 Crowley st., Lowell Gas Lt. Co.
Brennan, George F., 521 Dutton st., metal worker.
Brennan, Owen E., 26 Crowley st., hardware dealer.
Brierley, Eugene L., 74 So. Loring st., painter.
Briggan, George F., 22 Royal st., clerk.
Brigham, Charles R., 99 So. Walker st., manager.
Brigham, Charles R., 70 Queen st., clerk.
Brimigion, Caleb, 58 Agawam st., bleachery.
Bressette, Rupert N., 5 Crescent st., clerk.
Broadbent, John W., 42 Maple st., weaver.
Brodeur, Arthur, 13 Gold st., clerk.
Brodeur, Arthur J., 546 Middlesex st., clerk.
Brock, Charles F., 47 Seventh ave., clerk.
Brogan, Frank M., 88 Mt. Vernon st., insurance.
Brogan, Joseph, 80 Mt. Washington st., machinist.
Brosnahan, Patrick H., 796 Lawrence st., dealer.
Brosnan, Patrick T., 38 Second ave., salesman.
Brosseau, Albert, 16 Lawton st., machinist.
Brosseau, Charles G., 43 Essex st., clerk.
Brousseau, Pierre A., 43 Essex st., clerk.
Bourgeois, Gustave M., 76 Mt. Hope st., clerk.
Brown, James T., 53 Tolman ave., operative.
Brown, Patrick J., 198 Cross st., operative.
Brown, Patrick W., 764 Broadway, operative.
Brown, Patrick H., 980 Varnum ave., brakeman
Brown, William J., 23 Chase ave., clerk.
Bruin, Michael J., 81 Mt. Vernon st., janitor.
Brunelle, Arthur J., 536 Fletcher st., clerk.
Brunelle, Oliva, 33 Gershom ave., operative.
Buckley, Frederick J., 36 Mead st., leather worker.
Buckley, James H., 23 Starbird st., cigarmaker.
Buckley, John T., 11 Livermore st., painter.
Buote, Michael, 407 Moody st., operative.
Burbank, Edgar P., 43 Second ave., operative.
Burbank, Percival P., 14 Eighth ave., dealer.

Burbeck, William J., 32 Sheldon st., retired.
Burgoyne, John J., 3 Cedar st. ct., water works.
Burke, Edward N., 216 Nesmith st., retired.
Burke, Joseph P., 11 West st., weaver.
Burke, William P., 30 Abbott st., watchman.
Burkinshaw, Joseph, 25 Marlborough st., druggist.
Burns, Andres F., Jr., 48 Fremont st., barber.
Burns, Arthur G., 160 Pine st., clerk.
Burns, Francis A., 117 Stackpole st., bookbinder.
Burns, George E., 28 Crowley st., clerk.
Burns, James E., 23 State st., laborer.
Burns, James J., 48 Lincoln st., spinner.
Burns, Charles H., 84 Methuen st., barber.
Burns, Joseph F., 18 Bellevue st., clerk.
Burns, Stephen F., 282 Fayette st., operative.
Burns, Thomas J., 25 Fulton st., clerk.
Burt, John W., 760 Broadway, beamer.
Burt, Fred K., 52 Hanks st., druggist.
Burt, Walter N., 385 Walker st., clerk.
Burrill, John F., 612 Beacon st., clerk.
Butler, John R., 159 Broadway, waiter.
Buttermore, John F., 58 Agawam st., tanner.
Byam, Arnold A., 12 Albert st., real estate.
Byam, Otis, 79 Canton st., milk dealer.
Byam, George A., Jr., 27 Fleming st., real estate.

C

Caddell, Peter, 94 Viola st., overseer.
Cadorette, Joseph, 118 Ennell st., mason.
Cady, George L., Jr., 150 Mt. Vernon st., box maker.
Cady, Louis, 629 East Merrimack st., park dep't.
Cahill, George W., 259 Worthen st., laborer.
Callahan, Bernard, 114 Third st., retired.
Callahan, George T., 122 Humphrey st., advertiser.
Callahan, Phillip H., 82 Beacon st., painter.
Callery, Bartholomew, 29 Bourné st., Health Dept.
Calnan, Cornelius F., 84 Forrest st., U. S. C. Co.
Camire, Evariste A., 753 Moody st., storekeeper.
Cameron, Donald M., 328 Wilder st., manufacturer.
Cameron, James, 105 Georgia ave., dealer.

Campbell, Abel R., 23 Harris ave., real estate.
Campbell, Frank J., 711 Westford st., druggist.
Campbell, Frederick L., 53 Keene st., asst. boss.
Campbell, George M., 20 Nesmith st., dealer.
Campbell, Thomas J., 848 Moody st., dealer.
Campbell, James C., 131 Church st., operative.
Campbell, John H., 53 Keene st., chauffeur.
Cannon, Michael F., 69 Loring st., printer.
Cantin, Eugene H., 104 School st., real estate.
Clark, Joseph M., 35 Oak st.
Clark, T. Frank, 35 Oak st.
Carmichael, James H., 59 Huntington st., overseer.
Carney, Edward B., 25 Plymouth st., banker.
Caron, Amedee, 99 Ennell st., tailor.
Caron, Joseph, 74 Branch st., carder.
Carragher, Frederick F., 365 Beacon st., laborer.
Carrier, Joseph, 208 Cumberland rd., dealer.
Carroll, Daniel F., 216 Thorndike st., master plumber.
Carroll, John J., 97 Crawford st., machinist.
Carroll, Joseph P., 780 Chelmsford st., nurse.
Carroll, William A., 97 Crawford st., druggist.
Caron, Thomas, 19 Phœbe ave., operative.
Carufel, Emile, 215 White st., operative.
Casey, James B., 603 Chelmsford st., manufacturer.
Casey, James J., 815 Chelmsford st., salesman.
Cashman, Martin F., 68 Varnum st., stage hand.
Cassidy, Frank A., 8 Livermore st., assistant janitor.
Cawley, William F., 85 Rogers st., clerk.
Cavanaugh, Patrick, 565 Broadway, waiter.
Chabot, George A., 51 East Meadow rd., operative.
Chaloux, William L., 88 Bartlett st., manager.
Champagne, Eusebe, 4-455 Moody st., musician.
Chandler, George R., 107 Holyrood ave., teller.
Chapman, Herbert L., 418 Walker st., printer.
Chappell, Francis, 18 Ash st., laborer.
Charron, Edmond J., 142 Grand st., machinist.
Charron, Sylva, 134 West st., chef.
Cheney, Frederick R., 36 B st., tannery.
Choate, Albert H., 40 Hawthorne st., drug clerk.
Choquette, Jeremie A., 89 Butterfield st., salesman.
Chouinard, Zenon, 689 Lakeview ave., repairer.

Chretien, Joseph A. N., 159 Ludlam st., floor walker.
Christman, Eustache, 154 Woburn st., grocer.
Claffy, John W., 28 Lawrence st., second hand.
Clapp, Harry C., 116 Hanks, dealer.
Clancy, Arthur F., 48 Fisher st., conductor.
Clancy, John, 198 Riverside st., dealer.
Clancy, James J., 39 Whipple st., teamster.
Clancy, Peter, 560 Broadway, machinist.
Clark, Cornelius E., 228 High st., retired.
Clark, George M., 222 High st., moulder.
Clark, Lewis C., 550 Varnum ave., clerk.
Clay, Harry E., 12 Orford st., operator.
Cleary, John H., 149 E. Merrimack st., clerk.
Clinton, William H., 27 Bowden st., B. & M. R. R.
Clowery, John J., 10 Alder st., barber.
Coburn, Clarence G., 215 Mammoth rd., retired.
Cochrane, Delwin A., 32 Maryland ave., clerk.
Coffey, James J., 148 Sanders ave., dealer.
Coffey, Humphrey, 183 Wilder st., provisions.
Coffey, Timothy J., 148 Sanders ave., grocer.
Cogger, John H., 80 White st., printer.
Cogger, Patrick, 438 Riverside st., contractor.
Coggeshall, Frederick H., 38 Nichols st., clerk.
Cognac, Leonce, 153 Avon st., clerk.
Cole, Fred H., 727 East Merrimack st., foreman.
Coleman, Joseph H., 881 Bridge st., painter.
Collins, Cornelius E., 394 High st., real estate and insurance.
Collins, William E., 145 Andrews st., lather.
Comerford, Fred S., 32 Nineteenth st., salesman.
Conant, Herbert J., 16 Grove st., clerk, B. & M. R. R.
Connolly, John F., 108 Agawam st., wool sorter.
Connor, Bernard A., 386 Fletcher st., water works.
Connor, Edward, 48 May st., second hand.
Connor, Francis A., 71 Richardson st., superintendent.
Connors, Charles A., 103 Westford st., clerk.
Conroy, Robert F., 153 Appleton st., manager.
Conroy, John, 509 East Merrimack st., operative.
Conroy, Thomas, 124 Bastlett, clerk.
Constantineau, Alexander, 58 Second ave., painter.
Conway, George F., 61 Hoyt ave., provisions.
Conway, John T., 169 Saunders ave., express.

LIST OF JURORS

9

Conway, Richard B., 15 Windsor st., clerk.
 Cooney, Dennis J., 649 Westford st., dealer.
 Corbett, John H., 14 Burns st., provision dealer.
 Corbett, Thomas J., 361 Concord st., salesman.
 Corcoran, Joseph F., 40 Fort Hill ave., printer.
 Cosgrove, Christopher, 4-32 Pleasant st., agent.
 Cossette, P. Napoleon, 33 Wannalancit st., real estate.
 Cossette, Jeffrey, 40 Sparks st., dealer.
 Costello, Robert E., 497 School st., foreman.
 Cote, Charles A., Jr., 52 Coral st., auto livery.
 Cote, Eugene J., 71 Third st., loomfixer.
 Cote, Herve E., 28 Fourth st., tinsmith.
 Cote, Raoul, 161 East Meadow rd., machinist.
 Cottrell, William H., 17 Viola st., printer.
 Coughlin, James, 406 Stevens st., shoemaker.
 Coutes, Joseph, 265 Cheever st., dealer.
 Cover, Frank G., 30 West Bowers st., dealer.
 Cox, Terence J., 239 Stackpole st., barber.
 Coyne, John J., 33 St. James st., salesman.
 Craig, Peter R., 59 Porter st., superintendent.
 Crane, Eugene F., 517 Westford st., real estate.
 Cornellier, Louis J., 479 Moody st., operative.
 Cottrell, Thomas S., 44 Crowley st., chiropodist.
 Craig, Malachy, 136 Moore st., U. S. C. Co.
 Crawford, John C., 24 Maitland ave., blacksmith.
 Crockett, Harry B., 549 Westford st., clerk.
 Crockett, Wallace W., 19 Liberty st., wheelwright.
 Cronin, Cornelius F., 344 Varnum ave., real estate.
 Cronin, Dennis F., 205 High st., waiter.
 Cronshaw, John, 17 Gold st., inspector.
 Crosby, Burton H., 111 Moore st., mason.
 Crosby, Frederick H., rear 111 Moore st., plasterer.
 Crosby, Sterling B., 129 Midland st., real estate.
 Crowley, John F., 14 Livermore st., clerk.
 Crowley, Robert E., Jr., 115 Fort Hill ave., real estate.
 Cruickshank, Alexander, 53 Highland ave., dealer.
 Cryan, John, 27 Bourne st., tanner.
 Cryan, Thomas E., 132 Grove st., conductor.
 Cuff, John H., 18 Agawam st., moulder.
 Cuff, Thomas S., 195 Moore st., druggist.
 Cull, Thomas F., 249 East Merrimack st., steam fitter.

Cunningham, Clarence, 37 Durant st., steward.
Cunningham, Fred W., 27 Fay st., shuttle maker.
Cunningham, Henry, 44 We. Fifth st., moulder.
Cunningham, Samuel S., 129 Moore st., confectioner.
Curtin, Edward A., 514 East Merrimack st., barber.
Curtin, Joseph P., 514 East Merrimack st., machinist.
Curran, John, 14 Mt. Grove st., inspector.
Cushing, Edward T., 103 3rd st., barber.
Cushing, Joseph L., 32 Mt. Washington st., manufacturer.
Cusick, James J., 27 Crowley st., clerk.
Cutler, John S., 840 Varnum ave., barber.
Cutter, Benjamin F., 71 Canton st., dealer.
Cutting, Lawrence F., 78^o Methuen st., clerk.

D

Dacey, James, 176 Andover st., clerk.
Daidy, Michael A., 445 Merrimack st., engineer.
Daigle, Henri, 17 Endicott st., operative.
Dalton, Francis M., 55 Nesmith st., stenographer.
Daly, John J., 19 North st., operative.
Daly, John W., 76 Andrews st., clerk.
Daly, William F., 20 Walden st., insurance agent.
Danahy, Frank J., 33 State st., plasterer.
Danahy, James D., 32 State st., plumber.
Danahy, John J., 22 Crowley st., tinsmith.
David, Albert W., 234 Gibson st., clerk.
David, Olier, 22 Dalton st., merchant.
Davis, Fred M., 47 Lundberg st., clerk.
Davis, John, 444 Stevens st., moulder.
Dawson, John J., 445 Middlesex st., manager.
Day, Frank J., 979 Central st., water works.
Day, James E., 493 Gorham st., agent.
Day, John F., 15 Auburn st., lamplighter.
Dean, Elmore T., 59 Westford st., Boston & Maine.
Dean, Eugene, 203 Salem st., laborer.
Dean, Eugene F., 203 Salem st., clerk.
Dean, Sam, 36 Chatham st., retired.
Dearborn, Lafayette A., 12 Totman st., engineer.
Decatur, Herman B., 91 Norcross st., salesman.
Delaney, Thomas B., 92 West st., installer.
Delehanty, William H., 592 Gorham st., brewery worker.
Delorme, Charles E., 368 Hildreth st., dealer.

Demaras, Harry, 14 Gilbride ter., constable.
Dempsey, Robert M., 57 Endicott st., operative.
Denault, Nazaire, 223 Christian st., carpenter.
Dery, Lewis, 63 Lilley ave., mason.
Desaulniers, Olivier L., 14 West Bowers st., clerk.
Descheneaux, Alberic, 179 Mt. Hope st., dealer.
Descheneaux, Louis, 767 Moody st., clerk.
Descheneaux, Omer, 69 Mt. Grove st., dealer.
Deslandes, Ambrose, 78 Queen st., barber.
Desmarais, Edelmard S., 716 Aiken st., dealer.
Desmond, Daniel A., 19 Wright st., dealer.
Desmond, Frederick H., 195 Stackpole st., clerk.
Devlin, Arthur A., 307 Thorndike st., stage hand.
Devlin, James P., 43 Willow st., printer.
Devlin, John J., 307 Thorndike st., bowling.
Dextra, Joseph, 518 Merrimack st., barber.
Dexter, Royal K., 319 Wilder st., dealer.
Dickson, David, 142 Smith st., dealer.
Dilts, Edward J., 24 Rutland st., student.
Dillworth, Daniel F., 95 Agawam st., clerk.
Dineen, Michael J., 25 Oliver st., conductor.
Dion, George, 185 Ludlam st., dealer.
Doherty, Henry P., 78 Bridge st., master painter.
Doherty, John J., 14 Hale st., mattress maker.
Doherty, Michael F., 315 Wentworth ave., confectionery.
Donnelly, Edward J., 14 Ames st., **real estate**
Donnelly, George, 281 Paige st., gentleman.
Donnelly, John F., 13 Newhall st., grocer.
Donohue, Michael J., 3 Brooks st., salesman.
Donohoe, James H., 45 Coral st., clerk.
Donovan, William H., 26 Madison st., dealer.
Doole, George Lee, 241 Moore st., operative.
Doran, Daniel, 354 Princeton st., assistant superintendent.
Doran, Henry F., 363 Broadway st., trimmer.
Dostaler, Frank X., 105 A st., provisions.
Douglass, John H., 137 Pleasant st., lunch cart.
Dow, James G., 149 B st., student.
Dow, Oscar C., 54 Parkview ave., clerk.
Dow, William A., 149 B st., plumber.
Doyle, George J., 15 Whipple st., barber.
Doyle, Stephen R., 533 Dutton st., musician.

Dozois, George H., 11 Spalding st., instructor.
Dozois, Hector A., 67 Varney st., machinist.
Dragon, Anthony F., 30 Sarah ave., collector.
Drew, John B., 32 Burt, st., dealer.
Drinan, George, 537 Merrimack st., machinist.
Drury, John E., 44 Hanks st., plumber.
Dube, Joseph, Jr., 15 Livermore st., messenger.
Dubois, Joseph, 793 Merrimack st., insurance.
Dubuque, George H., 417 Bridge st., clerk.
Dudevoir, Adelard, 520 Narmun ave., plumber.
Duffy, Michael A., 204 South st.,
Duffy, Martin E., 1054 Bridge st., cigar maker.
Duggan, Francis P., (U. S. C. Co.), 26 Agawam st.
Dufresne, Edward P., 14 Wiggin st., clerk.
Dunklee, Fred W., 62 Lundberg st., foreman.
Dunlavey, John C., 415 Worthen st., laborer.
Dunlay, John F., 682 Chelmsford st., truckman.
Dunlay, Patrick F., 16 Corson st., truckman.
Dunn, Charles W., 94 Fort Hill ave., clerk.
Dunn, James J., 16 Ellsworth st., stone cutter.
Dunn, Joseph, 610 School st., dealer.
Dupont, Arthur, 4 Willie ave., fixer.
Durkin, John T., 386 Concord st., printer.
Durkin, Thomas J., 77 New Spaulding st., compositor.
Dursthoff, Charles C., 1500 Gorham st., overseer.
Duval, Alfred, 802 Moody st., machinist.
Dwyer, John, 56 Waverley ave., painter.
Dwyer, James A., 312 Thorndike st., salesman.
Dwyer, Timothy J., 580 Gorham st., clerk.
Dyer, John J., 29 Bridge st., mill worker.

E

Eagan, Thomas E., 93 Nelson ave., clerk.
Eastham, William J., 159 Chapel st., clerk.
Edwards, Arthur S., 40 Marginal st., dealer.
Eno, Pierre T. A., 35 Race st., agent.
Enright, George W., 71 W. Richardson st., clerk.
Erskine, Charles M., 25 Clark rd., real estate.
Estabrook, Howard M., 22 Seventh ave., meat cutter.
Estes, Fred A., 715 Westford st., insurance.

F

Fagan, Michael J., 162 Smith st., chauffeur.
Fahey, William J., 862 Central st., plumber.
Fallon, Andrew J., 108 Meadowcroft st., foreman.
Farley, Harry P., 36 Prescott st., bottler.
Farrell, John M., 2 West View st., auctioneer.
Farrell, Samuel T., 358 Wentworth ave., salesman.
Farrington, John C., 182 Perry st., clerk.
Favreault, William A., 190 Pawtucket st., clerk.
Fecteau, Alexis F., 740 Merrimack st., clerk.
Fee, Thomas F., 126 Bartlett st., tailor.
Fels, Max W., 21 Bachman st., clerk.
Fife, James, 46 Merrill st., machinist.
Fife, William F., 23 Sargent st., paver.
Fielding, Albert, 36 Haines ave., pressman.
Fielding, Joseph, 137 Forest st., overseer.
Fielding, Joseph E., 637 Chelmsford st., merchant.
Filion J. Anaclet, 348 Hildreth st., jeweler.
Finlay, William D., 204 Moore st., metal worker.
Finnegan, Frank J., 15 Crane ave., collector.
Finnegan, Daniel T., 11 Sidney st., teamster.
Finnegan, Timothy D., 22 Agawam st., laborer.
Fitzgerald, Thomas J., 55 Grove st., dealer.
Flannery, Charles Thomas, 132 Pleasant st., conductor.
Flather, Frederick A., 68 Mansur st., treasurer.
Fleet, Sidney R., 329 East Merrimack, journalist.
Fleming, Samuel, 35 Methuen st., bootmaker.
Flood, James H., 118 Bartlett st., dealer.
Flynn, Eugene, 160 Agawam st., second hand.
Foisey, Joseph A., 327 Hildreth st., baker.
Foisey, Philip, Jr., 24 Gorham st., cook.
Fontaine, Edmond P., 17 Second ave., insurance.
Fontaine, Emery, 17 Second ave., operative.
Fontaine, George E., 54 Mammoth rd., operative.
Ford, William Nathan, 15 Harding st., janitor.
Forgays, Harold J., 24 Sidney st., salesman.
Forrest, Charles M., 30 Sanders ave., lumber dealer.
Forrest, Telephore, 859 Lawrence st., tannery.
Fortier, Joseph M. G., 36 Riverside st., watchmaker.
Fortin, Antoine, 903 Moody st., clerk.
Fortin, Leonce, 43 Plymouth st., manager.

Foye, Charles H., 182 South st., clerk.
Foye, Daniel E., 195 B st., dealer.
Foye, John J., 469 Pine st., dealer.
Foye, William P., Jr., 127 Durant st., salesman.
Frawley, David F., 66 Eustis ave., glazier.
Frayne, John J., 114 Rock st., barber.
Frazer, Thomas W., 52 Parker st., driver.
French, Albert F., 213 Park View ave., manufacturer.
French, Vernon A., 334 Mammoth rd., auto livery.
Frost, Charles E., 285 Princeton st., pedlar.
Frye, Austin A., 105 Eighteenth st., druggist.
Fuller, George B., 1524 Gorham st., lumber man.
Fullerton, Robert J., 17 Dutton st., second hand.

G

Gaffney, Everett M., 26 Third st., clerk.
Gagnon, Joseph A., 67 Mt. Hope st., dealer.
Gale, George Henry, 64 Lane st., loomfixer.
Gallagher, Charles A., 85 Gershom ave., inspector.
Gallagher, George 275 Fayette st., track layer.
Gallagher, James J., 168 Cumberland rd., cigar store.
Gallagher, Thomas J., rear 34 Coburn st., clerk.
Galley, Arthur C., 17 Winthrop ave., draughtsman.
Galley, Calvin L., 17 Winthrop ave., carpenter.
Galley, John E., 79 B st., carpenter.
Galvin, William H., 535 Lawrence st., fireman.
Gamache, Emile, 9 Rhodora st., grocer.
Gannon, Daniel J., 45 Moore st., dealer.
Gardner, John J., 71 Waterford st., merchant.
Gargan, Frank, 81 Bartlett st., operative.
Gargan, William J., 22 Ware st., bricklayer.
Garland, Arthur W., 27 So. Loring st., railroad clerk.
Garrick, Frederick D., 858 Bridge st., tinsmith.
Garvey, Thomas F., 72 Lilley ave., cigar maker.
Gaudette, George, 1117 Middlesex st., teamster.
Gaudette, Octove, 44 So. Loring st., wholesale confectioner.
Gauthier, Alfred J., 38 Lilley ave., blacksmith.
Gelinas, Victor, 94 Ford st., grocer.
Gendreau, Flavin, Circuit ave., tannery.

Genereux, Hildege, 15 James st., clerk.
Genest, Arthur, 475 Varnum ave., contractor.
Gerow, David, 769 Chelmsford st., hay and grain.
Giblin, John J., 176 Ennell st., musician.
Gilbert, Franz S., 50 Laurel st., overseer.
Gildee, James B., 35 Oak st., clerk.
Gill, Homer J., 28 Walker st., clerk.
Gilman, Albert I., 20 East Pine st., foreman.
Gilroy, Frank A., 145 Merrimack st., printer.
Gilroux, Frederick, 156 Riverside st., machinist.
Gilcreast, William J., 43 Forrest st., clerk.
Gionet, Aime, 158 Fourth ave., insurance.
Giroux, Arthur H. R., 794 Moody st., insurance.
Goldberry, Benard, 61 Howard st., city.
Golden, John F., 8 Butterfield st., clerk.
Gonzales, Havier L., 126 Gorham st., cutler.
Goodwin, William B., 111 Chestnut st., organist.
Gookin, John J., 15 Aberdeen st., manager.
Gordon, George W., 61 Loring st., carpenter.
Gormley, Joseph H., 11 Lyon st., insurance.
Gordan, J. Eugene, 68 Canton st., undertaker.
Gorman, James E., 566 Westford st., shoe dealer.
Gott, Paul M., 605 Bridge st., butcher.
Grady, John J., 576 School st., laborer.
Grady, Patrick A., 51 Barclay st., operative.
Grady, William E., 881 Varnum ave., manager.
Grant, Richard J., 25 Seventh st., dealer.
Gray, Daniel L., 353 Bridge st., barber.
Gray, Harry, 93 Dover st., provision dealer.
Gray, John J., 236 Plain st., real estate agent.
Grew, Wilbert, 106 School st., clerk.
Green, John J., 52 Bartlett st., laborer.
Green, Oliver H. P., 16 Spaulding st., carpenter.
Gregoire, Edouard, 86 Ottawa st., insurance agent.
Griffin, William J., 73 Fletcher st., manager.
Guild, Chester A., 21 Eighteenth st., linotyper.
Guimond, Adelard, 1847 Middlesex st., brakeman.
Gulline, Percy, 197 Pawtucket st., mfrg.
Guyette, Walter E., 372 Parker st., real estate.

H

Hackett, David J., 16 Crawford st., Water Works.
Haggart, Daniel L., 60 Bartlett st., mule spinner.
Haggerty, Joseph, 125 Grove st., telegrapher.
Haggerty, Michael, 171 Powell st., blacksmith.
Hale, Aura L., 94 Butterfield st., foreman.
Hale, Milo W., Jr., 25 3rd st., clerk.
Halstead, Charles W., 259 Princeton st., elec. lt. station.
Hamel, Alfred, 100 Shaw st., checker.
Hamel, Charles, 203 Ludlam st., contractor.
Hamil, Bernard, 199 Mammoth rd., mason.
Handley, Edward J., 279 Appleton st., clerk.
Hanson, James S., 584 Westford st., horse dealer.
Harkins, John J., 14 Walnut st., machinist.
Harriman, John, 517 Chelmsford st., overseer.
Harrison, Joseph W., 566 School st., overseer.
Hart, Daniel J., 52 Colonial ave., master baker.
Hart, John E., 86 West st., janitor.
Hart, John J., 336 East Merimack st., conductor.
Hartigan, Chester T., 137 Moore st., shipper.
Hartigan, Thomas F., 137 Moore st., folder.
Hartnet, John J., 105 Liberty st., operative.
Harrington, Charles P., 474 Gorham st., real estate.
Harrison, Fred, 442 Stevens st., overseer.
Harrison, Clifton B., 16 Bellevue st., machinist.
Hart, Eli B., 125 Cross st., secretary, American Legion.
Harvey, Joseph, 843 Moody st., master plumber.
Hayes, Daniel, 73 Fletcher st., salesman.
Healey, John W., 31 Crowley st., operative.
Healey, Thomas H., 921 Lawrence st., overseer.
Hearn, James, 50 Corbett st., watchman.
Hebert, Elzear R., 772 Moody st., clerk.
Hemman, Richard C., 245 Stevens st., cashier.
Henry, Daniel P., 116 Fort Hill ave., truckman.
Hessian, Thomas F., 30 Chippewa st., machinist.
Hetu, Hermidas, 12 Dane st., second hand.
Hickey, Albert W., 338 Fairmount st., clerk.
Hickey, Cornelius, 10 Walnut st., clerk.
Hickey, Walter H., 643 Westford st., foreman.
Higgins, John J., 135 Andrews st., undertaker.

Higgins, Joseph J., 84 Mt. Washington st., grocer.
Higgins, William F., 51 Abbott st., undertaker.
Hiland, Michael, 25 Ash st., operative.
Hill, Frank B., 27 Bellevue st., dealer.
Hill, James G., 24 Myrtle st., painter.
Hilliard, William B., 22 Webber st., machinist.
Hoar, Martin J., 31 London st., folder.
Hoar, Michael H., 161 Walker st., insurance.
Hoar, Patrick J., 183 Ennell st., barber.
Hodnett, Richard A., 622 Stevens st., B. & M.
Hogan, James A., 36 Cosgrove st., provisions.
Holden, Thomas J., 36 Prescott st., clerk.
Holgate, Benjamin, 97 Grove st., accountant.
Holmes, George H., 17 Shaffer st., clerk.
Holmes, Percy, 837 Lakeview ave., wool sorter.
Hopkins, Hary A., 190 A st., musician.
Hosmer, Cecil N., 147 Andrews st., clerk.
Houde, Theotime, 27 Sarah ave., clerk.
Howell, Wakefield D., 69 Nicholas st., clerk.
Howes, George E., 131 Varnum ave., salesman.
Howes, Walter I., 22 Brookside st., stockfitter.
Hoyle, Albert, 128 Mt. Hope st., plumber.
Hughes, Joseph, 105 So. Highland st., grinder.
Hudson, James E., 11 Hazeltine st., conductor.
Hull, Frank B., 606 Stevens st., foreman.
Humphrey, Arthur B., 1161 Bridge st., sales stable.
Humphriss, Frederick G., 70 Smith st., oiler.
Humphrey, Edson K., 43 Bellevue st., foreman.
Humphriss, Herbert H., 70 Smith st., machinist.
Hunt, Leonard D., 234 Cabot st., overseer.
Huntington, Edward W., 69 Stevens st., clerk.
Hylan, John B., 28 Nesmith st., gentleman.
Hyde, Daniel, 42 Humphrey st., machinist.

I

Ingham, Fred. 62 Robbins st., dealer.
Inglis, John J. 52 Hampshire st., clerk.
Ineson, William H., 1 Hampshire st., loom fixer.
Irish, Alanson E., 137 Stackpole st., clerk.
Irwin, John M., 53 St. James st., confectioner.

J

Jackson, John S., 120 Gates st., clerk.
Jalbert, Joseph, 100 Fourth ave., contractor.
Jean, Amedee, 39 Melvin st., retired.
Jennings, Joseph, 859 Lawrence st., retired.
Jennings, Joseph C., 33 South Whipple st., dealer.
Jensen, Otto, 23 Webber st., receiver.
Jewett, Frank E., 1281 Middlesex st., dealer.
Jodoin, Augustus J., 28 Campaw st., operative.
Jodoin, Joseph H., Jr., 23 Claire st., machinist.
Johnson, Francis, 494 Lawrence st., real estate.
Johnson, Michael J., 328 Suffolk st., organist.
Johnson, Curtis W., 488 Wilder st., bookkeeper.
Johnson, John H., 35 Barasford ave., carpenter.
Johnson, Thomas J., 183 Wilder st., clerk.
Johnston, Alexander, 173 Stackpole st., baker.
Johnston, William S., 173 Stackpole st., baker.
Jones, Edwin F., 93 West st., decorator.
Jones, Fred E., 440 Westford st., druggist.

K

Kane, Joseph P., 84 So. Highland st., clerk.
Kearns, George, 192 School st., clerk.
Keenan, William F., 15 Otis st., bleachery.
Kelleher, John J., 7 So. Whipple st., provisions.
Kelleher, Michael, 111 Agawam st., driver.
Kelley, Thomas L., 44 Boylston st., Mass. mills.
Kelley, Thomas F., 578 Andover st., clerk.
Kelley, William A., 16 Sargent st., dealer.
Kelley, William M., 32 John st., janitor.
Kenefick, William, 215 Stackpole st., engineer.
Kenney, Francis P., 207 West 6th st., gardener.
Kennedy, James J., 24 Ash st., manager.
Kennedy, Thomas H., 128 Third st., barber.
Kennedy, William R., 114 Warwick st., electric light trimmer.
Kernan, John Woodbury, 78 Gates st., supt.
Kershaw, Samuel, 596 Bridge st., dealer.
Kew, Loring R., 266 Princeton st., dealer.
Keyes, Henry J., 9 Fort Hill ave., clerk.
Keyes, Thomas, 694 School st., plumber.

Killerby, Frank, 26 London st., bookbinder.
Killings, William, 13 Westford st., second hand.
Killpatrick, Charles T., 27 Maryland ave., real estate.
Kimball, Clarence L., 785 Merrimack st., machinist.
King, Walter F., 205 Stackpole st., clerk.
King, Joseph D., 67 Bartlett st., lather.
King, Arthur F., 205 Stackpole st., electrician.
Kirane, John, 32 Crosby st., clerk.
Kirane, Joseph M., 28 Walnut st., leather worker.
Kirwin, John W., 919 Lawrence st., nickel plater.
Kirwn, Thomas J., 919 Lawrence st., operative.
Kittridge, Horace V., 34 Third ave., mason.
Kivlan, John H., 73 Moore st., bookkeeper.
Knapp, Fred L., 76 Florence ave., clerk.
Knowlton, Harry W., 24 Monadnock ave., draughtsman.

L

Labrie, Eugene, 772 Merrimack st., manager.
Laffamme, Gerdia J., 1036 Middlesex st., clerk.
Laffeur, Frederick, 1081 Middlesex st.
Laffeur, Harvey A., 44 West Meadow rd., collector.
Lajoie, Ovila, 722 Merrimack, dealer.
Lambert, Maurice J., Jr., 342 Westford st., dealer.
Lamberton, John A., 114 So. Loring st., editor.
Landers, Charles J., 27 Wamesit st., printer.
Landry, Edward W., 15 Gershom ave., clerk.
Landry, Ernest Arthur, 17 Gershom ave., clerk.
Lapoint, Bonnie E., 41 Nichols st., International.
Lapointe, Martin, 41 Nichols st., harness maker.
Larivee, John B., 187 Cumberland rd., conductor.
Larochele, Elzear J., 28 White st., reporter.
La Rock, Joseph, Jr., 57 Marshall st., operative.
Latham, Frank, 587 Stevens st., clerk.
Laurin, Carl G., 40 Lundberg st., stone cutter.
Lavelle, Raymond J., 282 Appleton st., advt. solicitor.
Lavery, James A., 295 Appleton st., clerk.
Lavallee, Henry, 75 Gershom ave., jeweler.
Lavallee, Rosario, 59 Crawford, jeweler.
Lawrenson, John E., 6 rear 536 Gorham st., waiter.
Lavoie, Arthur, 114 Ford st., grocer.

Laycock, Joseph G., 38 Crowley st., chemist.
Leadbetter, Chipman O., 28 Rutland st., deputy superintendent.
Leary, Daniel, 118 Mt. Washington st., plumber.
Leary, Dennis F., 339 Lincoln st., real estate dealer.
Leary, Jeremiah F., 99 Pleasant st., janitor.
Lecam, Joseph H., 30 Haines ave., clerk.
Lebrun, Nelson J., 192 Pawtucket st., clerk.
Lederman, Philip M., 55 Stevens st., dealer.
Lee, John J., 147 Gershom ave., salesman.
Lee, Robert J., 55 Laurel st., machinist.
Lee, Michael A., 64 Bartlett st., carpenter.
Leggat, Horatius B., 640 Broadway, teacher.
Lemkin, Morris, 5 Hampshire st., dealer.
Leveille, Arthur, 122 Mt. Washington st., clerk.
Lew, Fred P., 477 Merrimack st., dyer.
Little, Edwin F., 56 6th ave., stock broker.
Livingston, Cornelius S., 208 Branch st., paymaster.
Livingston, Ephraim D., 68 Branch st., watchman.
Loranger, Louis, 18 Arlington st., clerk.
Loranger, Zephirin, Jr., 263 E. M st., clerk.
Loezau, Napoleon M., 45 Endicott st., clerk.
Lull, George E., 11 Nesmith st., merchant.
Lunt, Jason, 18 Lane st., merchant.
Lussier, Ferdinand, 83 Lilley ave., operative.
Lussier, George H., 903 Moody st., operative.
Lussier, Joseph A., 28 Grand st., machinist.
Lussier, William O., 9 Bowers st., machinist.
Lyle, James E., 356 E. M st., jeweler.
Lynch, Thomas J., 8-33 So. Whipple st., laborer.
Lynch, Patrick, 159 Walker st., barber.
Lyons, Harry D., 52 Queen st., car shops.
Lyons, John K., 6 Watson ave., pin maker.
Lyons, Maurice T., 41 St. James st., motorman.
Lyons, Richard, 48 Prospect st., foreman.

M

Mack, John F., 294 East Merrimack st., clerk.
MacKenzie, Donald W., 292 Wilder st., dealer.
Madden, James H., 38 Keene st., janitor.
Magee, John J., 169 High st., grocer.

Magras, Joseph, 763 Moody st., clerk.
Maguire, George F., 280 High st., grocer.
Maguire, John E., 35 Mead st., janitor.
Maguire, Martin H., 106 Agawam st., U. S. C. Co.
Maguire, Philip F., 57 Sidney st., weaver.
Maguire, Patrick J., 35 Mead st., retired.
Mahan, James F., 57 Beaulieu st., slater.
Mahoney, John P., 37 Laurel st., dealer.
Mahoney, Thomas, Jr., 46 Butterfield st., clerk.
Major, Frank A., 60 Rea st., second hand.
Malorey, Frank A., 694 School st., stone mason.
Maloney, James R., 97 Pleasant st., laborer.
Maloney, John J., 195 Pleasant st., barber.
Mansfield, George F., 306 Wilder st., bookkeeper.
Mansur, Arthur F., 182 Andover st., retired.
Manseau, Vidal Z., 101 Westford st., clerk.
Marchand, Joseph P., 18 Sargent st., machinist.
Marchand, George E., 15 Harding st.
Markham, Michael J., 78 Chauncey st., dealer.
Martell, Hormidas J., 799 Moody st., supt. wire works.
Marden, Philip S., 11 Fairview st., managing editor.
Martin, Edward F., 39 Durant st., retired.
Martin, John H., 196 Mt. Pleasant st., merchant.
Martin, John F., 282 High st., clerk.
Martin, Mizael, 2-500 Moody st., tailor.
Mason, Charles, 21 Belle ave., machinist.
Masson, Lewis, 21 Belle ave., machinist.
Matte, Edmond, 930 Moody st., tinsmith.
Matthews, Nathaniel W., Jr., 2 rear 7 So. Whipple st., printer.
Maxwell, John F., 124 Hanks st., overseer.
May, Thomas, 1406 Varnum ave., gate tender.
Mayberry, Oliver W., 62 Jenness st., dealer.
Mayberry, Solomon S., 54 Jenness st., real estate.
McAleer, James E., 129 Llewellyn st., clerk.
McAloon, Fred F., 14 Pleasant st., weaver.
McAloon, John B., 112 Sixth st., weaver.
McAlvin, Henry J., 6 Favor st., teamster.
McAvoy, Thomas, 1 Fowler rd., dealer.
McCabe, William, rear 17 Queen st., teamster.
McCaffrey, John H., 186 Pleasant st., carpet weaver.
McCann, John, 71 Agawam st., wool sorter.

McCann, Patrick, 412 Lincoln st., dresser.
McCarron, Anthony, 142 Concord st., grocer.
McCartin, Patrick, 116 Pleasant st., conductor.
McCarthy, Andrew, 656 Gorham st., advertising.
McCarthy, John P., 9 Pihl st., machinist.
McCarthy, John P., 744 Merrimack st., operative.
McCarty, John T., 17 Westwood ave., janitor.
McCarty, Patrick, 17 Westwood ave., machinist.
McCarthy, Timothy F., 28 Butterfield st., clerk.
McCarthy, James F., Jr., 28 Butterfield st., clerk.
McCormick, John E., 108 Livingston ave., clerk.
McCullough, John, 281 High st., grocer.
McDonald, John J., 208 Mt. Hope st., second hand.
McDonough, Edward F., 184 South st., undertaker.
McElholm, William H., 465 Westford st., plumber.
McElroy, George T., 157 Agawam st., painter.
McElholm, James F., 53 Crowley st., electrician.
McEnaney, Fred F., 187 Pleasant st., claim agent.
McEvoy, Arthur M., 104 Tenth st., student.
McFarlin, J. Henry, 83 Howard st., janitor.
McGauvran, William H., 118 Mt. Washington st., merchant.
McGenniss, James, 23 Read st., insurance.
McGilly, Patrick, 75 Hoyt ave., wool sorter.
McGlinchey, Michael, 84 Manchester st., grocer.
McGreevy, Eugene E., 216 Foster st., clerk.
McHugh, Michael F., 258 Merrimack st., clerk.
McHugh, William E., 77 Fremont st., compositor.
McIninch, Robert J., 39 Chestnut sq., presser.
McKenna, George B., 13 Cosgrove st., undertaker.
McKenzie, Collin H., 23 Methuen st., clerk.
McKeon, James E., 37 Orchard st., clerk.
McKenna, George T., 12 West Adams st., conductor.
McKenzie, Charles T., 140 Methuen st., cartridge shop.
McKenzie, Leo J., 140 Methuen st., carpenter.
McKenzie, Herbert, 140 Methuen st., water dept.
McMahon, Frank, 28 Willie st., clerk.
McMahon, Joseph F., 452 Chelmsford st., plumber.
McMahon, Joseph H., 23 Fourth ave., conductor.
McMahon, William H., 30 3rd ave., steamfitter.
McNabb, James S., 106 Pleasant st., laundryman.
McNabb, John H., 108 Pleasant st., laundry.

McNamee, Charles A., 48 Mt. Vernon st., chef.
McNulty, Frank B., 38 We. Fifth st., clerk.
McNulty, John F., 255 Thorndike st., hostler.
McOsker, Frank, 576 School st., waiter.
McOsker, George M., 17 Liberty st., barber.
McOsker, James F., 39 Grace st., tool maker.
McQuade, Arthur F., 11 Westchester st., fixer.
McQuade, Daniel E., 600 Andover st., dealer.
McQuade, Hugh B., 10 Pleasant st., second hand.
McQuaid, Arthur J., 197 Pleasant st., loomfixer.
McSorley, Christopher, 400 Concord st., clerk.
McSorley, John F., 332 Wentworth ave., dealer.
McVey, James M., 21 Liberty st., foreman.
McVey, William F., 24 Linden st., clerk.
Mealey, Frank L., 47 Bellevue st., copper stamps.
Meehan, Edward J., 289 Concord st., teamster.
Meehan, John P., 26 Cosgrove st., granite cutter.
Meehan, Joseph P., 196 Westford st., clerk.
Meloy, Fred'k F., 30 Fort Hill ave., contractor.
Mercier, Chester, 284 Stevens st., clerk.
Merrill, Herbert C., 157 Nesmith st., chemist.
Merritt, William H., 262 Concord st., retired.
Mevis, George B., 869 Bridge st., merchant.
Miller, Charles H., 13 Harrison st., conductor.
Miller, Malcolm, 981 Bridge st., farmer.
Minahan, James H., 74 Aiken ave., operative.
Miskell, Martin J., 292 East Merrimack st., theatrical.
Mitten, Anthony D., 43 A st., blacksmith.
Mueller, George A., 91 Willie st., clerk.
Muldoon, Owen, 259 Branch st., laborer.
Molloy, Andrew, 294 Riverside st., Lowell Water Works.
Molloy, James J., 18 Marginal st., clerk.
Monahan, Patrick R., 39 West Fifth st., teamster.
Monette, Hector, 14 Eustis ave., teamster.
Monier, Raoul H., 34 Beaulieu st., floorwalker.
Moody, Percy H., 44 Florence ave., clerk.
Moran, John, 40 Alder st., machinist.
Morrissey, Frank T., 46 Albion st., dealer.
Mosley, Harry, Jr., 24 Viola st., superintendent.
Mulcahy, M. Wilfred, 109 Rogers st., dealer.
Mullin, Frank, 14 Lundberg st., electrician.

Mullin, J. Eugene, 6 Bleachery st., insurance.
Mulcahey, Thomas E., 23 Harvard st., painter.
Mullaney, Michael, 4 Litchfield ter., plumber.
Mullaney John J., 25 Varneif St. plumber
Mulno, Harry O., 324 Boylston st., superintendent.
Mullen, Leon H., 33 Bourne st., clerk.
Mullen, Joseph, 23 Burt st., merchant.
Murphy, Edward Dennis, 12 Chipewa st., clerk.
Murphy, Frank, 52 Central st., laborer.
Murphy, James F., 35 Potter st., laborer.
Murphy, John J., 25 State st., N. Y., N. H. & H. R. R.
Murphy, Thomas B., 185 Moore st., B. & M. R. R.
Murphy, James A., 86 Hanks st., overseer.
Murray, Frank, 86 Fourth ave., blacksmith.
Murray, John, 139 Chapel st., clerk.
Murray, John J., 128 Hoyt ave., clerk.
Murphy, Joseph F., 278 High st., printer.
Murphy, Thomas F., 189 Parker st., plumber.
Murphy, William J., 74 Agawam st., dealer.
Myers, James W., 21 Albert st., assistant superintendent.
Murphy, George E., 66 Main st.

N

Needham, Charles N., 615 Chelmsford st., carpenter.
Neeson, John J., 210 Cross st., machinist.
Nelson, John A., 528 Andover st., supt.
Nestor, Patrick F., 348 Stackpole st., lamplighter.
Nichols, Henry J., 338 Varnum ave., gardener.
Noonan, John J., 219 Salem st., salesman.
Normanden, Charles, 34 Hancock ave., tailor.
Novell, Maurice H., 3-449 Moody st., barber.
Nugent, Michael, 13 L st., operative.

O

Oates, William, 44 Crawford st., machinist.
O'Beirne, Thomas, 704 Merrimack st., operative.
O'Brien, Charles T., 162 Church st., laborer.
O'Brien, Daniel J., 90 Park View ave., real estate.
O'Brien, John J., 161 Pleasant st., slater.
O'Brien, Joseph H., 236 Salem st., clerk.

O'Connell, Luke, 64 Fay st., retired.
O'Connell, Richard A., 505 Westford st., dealer.
O'Connell, William E., 183 Stackpole st., goldsmith.
O'Connell, William T., 168 South st., clerk.
O'Connor, Edward F., 251 Moore st., grocer.
O'Connor, Frederick F., 102 Pleasant st., clerk.
O'Connor, John A., 102 Pleasant st., tanner.
O'Connor, James F., 102 Pleasant st., plasterer.
O'Connor, James H., 102 Pleasant st., foreman.
O'Connor, John J., 102 Pleasant st., tanner.
O'Connor, John J., 298 Riverside st., contractor.
O'Connor, Thomas F., 823 Lawrence st., agent.
O'Dea, Daniel, 68 Church st., dealer.
O'Dea, Gilmore, 68 Church st., chauffeur.
O'Dea, John B., 68 Church st., clerk.
O'Donnell, Martin, 85 West Union st., telephone .
O'Dwyer, Jeremiah J., 148 Midland st., conductor.
O'Grady, James Francis, 247 Gorham st., salesman.
O'Hagan, Bernard, 491 Gorham st., clerk.
O'Hagan, Michael, 29 Albion st., operative.
O'Heir, Albert E , 241 Clark Rd., dealer.
O'Hearn, Thomas B., 282 Riverside st., contractor.
O'Loughlin, William, 198 Worthen st., clerk.
O'Neil, Arthur J., 261 Concord st., clerk.
O'Neil, Daniel P., 74 Weed st., manufacturer.
O'Neill, James J., 29 Crowley st., cashier.
O'Neill, Peter, 120 Bowden st., carpenter.
O'Reilly, Timothy P., 32 High st., barber.
Oreutt, Frank A., 26 Read st., stable.
Orrell, Ernest R., 19 Hillside st., machinist.
Ortner, Simon, 114 Shaw st., dealer.
Osgood, Daniel L., 151 Cabot st., overseer.
O'Shea, Frank, 149 Concord st., clerk.
Osterhout, Fred S., 123 Westford st., commercial traveler.
O'Sullivan, Timothy F., 195 Cross st., manager.
O'Toole, John, 273 Appleton st., clerk.

P

Palmer, Forrest E., 1 Barton avé., bookkeeper.
Paradis, Peter A., 526 School st., barber.
Paradis, Robert C., 164 Third st., reporter.

Parent, Philius, 180 Tremont st., machinist.
Patenaude, Charles S., 233 Walker st., engraver.
Parthenais, David A., 30 Phillips st., clerk.
Patten, Henry N., 42 Florence ave., bookkeeper.
Patten, William T., 235 Mammoth rd., dealer.
Payette, Adelard, 20 James st., retired.
Payette, Joseph, 31 Gershom ave., tailor.
Payne, John, 181 Stackpole st., dealer.
Pearson, George F., 24 Grace st., clerk.
Pascall, Frederick, 58 Carlisle st., machinist.
Perkins, Paul L., 240 Jewett st., auditor.
Perkins, Stewart, 75 Howard st., barber.
Perreault, Arthur C., 199 Stackpole st., tanner.
Perreault, Oscar A., 18 Rose ave., clerk.
Perron, Joseph, 215 Princeton st., barber.
Person, Nils, 82 London st., carpenter.
Phelps, John L., 1-29 Boynton st., carpenter.
Phelps, Thomas J., 142 Bellevue st., foreman.
Phinney, Albert Warren, 7 A st., surveyor.
Phornare, Anthony, 35 Burns st., clerk.
Pierce, George, 11 Pihl st., gardener.
Pickering, Samuel A., 59 Hastings st., carpenter.
Pickering, George L., 27 Butterfield st., carpenter.
Pinkham, Arthur S., 27 Harrison st., publicity manager.
Plaisted, Burton W., 110 Warwick st., clerk.
Pollard, Harry G., 96 Mansur st., merchant.
Power, Warren M., 73 Fletcher st., editor.
Powers, John J., 125 Cross st., driver.
Powers, John T., Jr., 125 Cross st., student.
Preston, Charles R., 39 Elliott st., civil engineer.
Primeau, John, 883 Lakeview ave., motorman.
Prince, Arthur D., 5 Simpson st., merchant.
Proctor, Charles S., 187 Hovey st., paper dealer.
Proctor, Frank D., 248 Foster st., clerk.
Putnam, Alonzo, Jr., 848 Bridge ave., salesman.
Putnam, Frank H., 12 Marlborough st., dealer.
Putnam, Lewis A., 19 Eighth ave., clerk.
Peltier, Willis, Jr., 803 Moody st., jeweler.

Q

Queenan, Eugene C., 48 Varney st., clerk.
Queenan, James J., 271 Concord st., clerk.

Queenan, John H., 26 Broadway, clerk.
Quigley, John M., 62 Inland st., teamster.
Quinlan, James J., 418 Chelmsford st., conductor.
Quill, Daniel, 9 Alma st., barber.
Quinn, Daniel A., 29 Bridge st., electrician.
Quinn, Felix, Jr., 67 Bartlett st., laborer.
Quinn, James J., 37 State st., laborer.
Quinn, Michael J., 11 Eighth st., electrician.
Quinn, Timothy, 109 Sherman st., foreman.
Quirbach, Henry C., 21 Fairfax ave., cigar maker.

R

Racette, John, 527 Moody st., manufacturer.
Rafferty, Michael, 320 Fletcher st., laborer.
Rafferty, William, 85 Branch st., salesman.
Ralls, Austin, 36 Third ave., clerk.
Ranlett, Fred M., 445 Merrimack st., dealer.
Ready, Francis E., 221 Hildreth st., carpenter.
Ready, Patrick J., 26 Saratoga st., tanner.
Ready, William B., 10 Bertha st., barber.
Ready, William E., 67 Walker st., dealer.
Reardon, William F., 42 Arlington st., retired.
Redding, William, Jr., 82 Read st., clerk.
Reed, William E., 13 Blinkhorn ave., clerk.
Regan, Michael, 26 Andover st., laborer.
Renaud, Louis, 26 Grand st., clerk.
Riensterna, Torsten, 43 Sidney st., wool sorter.
Regan, Michael J., 649 School st., motorman.
Regan, Denis, 27 Windsor st., checker.
Reilley, Peter W., 137 Hovey st., printer.
Reynolds, Michael, 139 Chapel st., expressman.
Richard, Francois Xavier, 420 Fletcher st., jeweler.
Richards, Charles H., 23 Fort Hill ave., collector.
Richards, Lyman H., 93 Crawford st., shoe cutter.
Richburg, William H., 232 Varnum ave., shoe cutter.
Rigby, William H., 19 Seventh ave., superintendent.
Riley, Charles P., 65 Chestnut st., smoke inspector.
Riley, James F., 22 Ash st., clerk.
Riley, Luke J., 101 Third st., barber.
Riordan, William F., 42 Arlington st., dealer.

Rivet, Francis L., 484 Moody st., dealer.
Roach, Andrew F., 22 Ash st., dealer.
Roach, Patrick Francis, 85 Moore st., bookkeeper.
Roark, James S., 210 Parker st., plumber.
Roark, John J., 210 Parker st., clerk.
Roarke, Joseph H., 412 E. Merrimack st., clerk.
Robertson, Abel P., 75 Smith st., foreman.
Robertson, William L., 468 Andover st., merchant.
Robertson, John L., 470 Andover st., furniture dealer.
Robinson, William S., 40 Crowley st., U. S. C. Co.
Rochette, Louis Victor, 730 Merrimack st., student.
Rochette, Ralph A., 730 Merrimack st., student.
Rogers, John F., 29 Cedar st., undertaker.
Romain, Isaac B., 49 Norcross st., machinist.
Rooney, John J., 238 Pine st., superintendent.
Rooney, James H., 238 Pine st., dentist.
Rourke, John, 9 Sixth ave., janitor.
Rosseau, Willie, 14 Spaulding, dealer.
Rousseau, Arthur, 14 Spaulding, carpenter.
Rousseau, Napoleon C., 332 East Merrimack st., clerk.
Roux, J. Arthur, 19 White st., contractor.
Rowe, Thomas H., 97 Varney st., clerk.
Rowland, Charles T., 5 Belmont st., wholesale grocer.
Roy, Joseph G., 87 Chestnut st., salesman.
Royal, Garrett G., 32 Phillips st., operative.
Runels, George H., 240 Gibson st., real estate.
Runels, Ralph E., 4 Harland ave., dealer.
Russell, John L., 17 Victoria st., manager.
Ryan, Albert J., 756 Westford st., real estate.
Ryan, Arnold J., 90 D st., retired.
Ryan, Patrick, 46 Birch st., clerk.
Ryan, Stephen J., 73 Stevens st., hatter.
Robbins, George L., 20 Willow st., engineer.
Rynne, Michael, 76 Elm st., clerk.

S

Sadlier, Charles P., 46 Keene st., tanner.
Sadlier, George E., 46 Keene st., clerk.
Sadlier, Fred A., 46 Keene st., clerk.
Safford, Arthur T., 266 Andover st., engineer.

Salmon, William, 3 Harts ave., laborer.
Sanderson, George, 173 Ennell st., operative.
Sanderson, George W., 137 Stackpole st., clerk.
Sargent, George A., 49 Andover st., lineman.
Sarre, Louis, 834 Westford st., dealer.
Sarre, Leon E., 842 Varnum ave., picture framing.
Saunders, Thomas A., 325 Mammoth rd., agent.
Sawyer, Mark H., 49 Pine st., engineer.
Sayers, John T., 129 Summer st., conductor.
Savard, Aime E., 311 Mammoth rd., baker.
Savard, John, 717 Middlesex st., machinist.
Scannell, William J., 62 Cambridge st., boiler maker.
Schloss, Charles C., 24 Harris ave., dealer.
Scott, John, 732 Stevens st., janitor.
Scott, William C., 257 Appleton st., machinist.
Scribner, George A., 158 Westford st., machinery dealer.
Sears, Charles, 264 Appleton st., foreman.
Sears, Fred J., 258 Merrimack st., manufacturer.
Sealey, Eldridge N., 120 High st., engineer.
Secord, Freeland, 3-49 Wilder st., D. L. Gage Co.
Senter, Arthur H., 238 Cabot st., carpenter.
Sharkey, John W., 8 Carter st., salesman.
Sharkey, Michael J., 517 School st., real estate dealer.
Shaw, James, 169 Merrimack st., clerk.
Shea, Dennis F., 94 Bridge st., clerk.
Sheehan, James A., 30 Fort Hill ave., clerk.
Sheehan, Michael J., 50 Agawam st., conductor.
Sheehy, James, 3 Pleasant st., provision clerk.
Shepard, Charles S., 100 Hanks st., steam fitter.
Sherman, Leonard F., 148 Princeton st., shoe manufacturer.
Short, Harry W., 185 Branch st., machinist.
Sicard, Jean B., 130 Avon st., dealer.
Sidebottom, John W., 649 Chelmsford st., foreman.
Silcox, Samuel, 19 Robert st., machinist.
Silver, Fred W., 94 So. Loring st., machinist.
Slattery, Charles D., 73 Pleasant st., clerk.
Slattery, Edward F., Jr., 122 Hoyt ave., real estate.
Smith, Charles P., 314 Nesmith st., real estate.
Smith, Chester F., 250 Foster st., travelling man.
Smith, Edward A., 425 Broadway st., machinist.
Smith, Henry A., 42 Mansur st., insuraance.

Smith, Henry, 37 Varnum st., barber.
Smith, Omer, 78 Aiken st., janitor.
Smith, Thomas M., 41 Coral st., clerk.
Smithson, Angelo L., 5 Myrtle st., overseer.
Somerset, Alfred J., 104 Woodward ave., clerk.
Soucie, William, 511 Bridge st., salesman.
Southam, Brook, 130 Westford st., overseer.
Spence, George T., 236 Chelmsford st., mfrg.
Stanley, Harry L., 135 Beacon st., coal dealer.
Starr, George S., 144 High st., weaver.
Stearns, Frank K., 122 Eleventh st., laundry.
St. Hilaire, Arthur, 110 Ford st., operative.
St. Hilaire, James, 15 Second ave., mason.
Stone, Edward F., 60 Lawrence Corp., Race st., operative.
Sturtevant, Augustus L., 32 Brookside st., clerk.
Stafford, William, 787 Moody st., clerk.
Stewart, Arthur A., 12 Chester st., instructor.
Stickney, Charles, 599 School st., inventor.
Surprenant, S. Joseph, 812 Merrimack st., dealer.
Silcox, Albert E., 45 Dunfey st., machinist.
Sullivan, Daniel, 105 Moore st., merchant.
Sullivan, Daniel T., 223 Stackpole st., dealer.
Sullivan, Dennis F., 31 E. Pine st., salesman.
Sullivan, Eugene, 55 Bartlett st., tailor.
Sullivan, Eugene P., 84 Maple st., primer.
Sullivan, George S., 33 Butterfield st., clerk.
Sullivan, James E., 785 Broadway, dealer.
Sullivan, John E., 58 Corbett st., B. & M. R. R.
Sullivan, John J., Jr., 114 Beach st., agent.
Sullivan, Michael J., 57 Hampstead, grocer.
Sullivan, Richard H., 8 Batchelder pl., teamster.
Sullivan, Thomas, A. D., 28 Grove st., dealer.
Sullivan, William H., 724 Bridge st., fish dealer.
Sullivan, William J., 17 Bowers st., plumber.
Sykes, Richard, 17 Rockingham st., overseer.

T

Taylor, Harold S., 672 School st., clerk.
Tansey, John F., 322 East Merrimack st., choachman.
Taylor, Samuel A., 12 Chase ave., watchman.
Tellier, Alderic, 236 White st., clerk.

Thibeault, Archie, 20 Melton st., clerk.
Thomas, George A., 118 Branch st., boilermaker.
Thomas, John, 45 Tolman ave., teamster.
Thomas, Robert R., 24 Loring st., electrician.
Thompson, James A., 68 Grove st., box manufacturer.
Thompson, Martin B., 242 Cabot st., overseer.
Thompson, Samuel H., 121 School st., hardware.
Thorpe, James, 100 Riverside st., treasurer Glass Co.
Tobin, Richard, 521 Dutton st., machinist.
Toomey, Eugene F., 170 Lawrence st., clerk.
Tracy, James H., 147 Concord st., laborer.
Tremblay, Onesime, 15 James st., operative.
Trepanier, J. Edmond, 11 Willie ave., piper.
Trottier, William, 30 Hampshire st., journalist.
Trull, George T., 752 Andover st., student.
Turcotte, Arthur L., 553 Fletcher st., clerk.
Turcotte, Louis P., 553 Fletcher st., dealer.
Turcotte, Oswald, 33 Ellis ct., baker.
Tully, John J., 533 Lawrence st., clerk.
Tuttle, Clinton P., 17 Wedge st., clerk.
Tuttle, Joseph T., 3 Dane ave., clerk.
Turgeon, Philippe, 50 Chestnut st., machinist.
Twohey, Edward, 14 Madison st., contractor.
Tyler, William H., 30 Epping st., gardener.

V

Vandenberg, William C., 386 Andover st., insurance.
Van Hise, Albert, 46 Bellevue st., pattern maker.
Viney, William B., 22 Tyler st., clerk.
Voisard, Hector, 99 White st., clerk.
Vaughan, John H., 14 Leverett st., boiler maker.

W

Wadleigh, Jude C., 305 Andover st., mill agent.
Walker, George H., 153 Winthrop ave., clerk.
Walker, Hugh G., 18 Pihl st., clerk.
Walker, Thomas C., 80 Chestnut st., druggist.
Walker, William H., 125 D st., loomfixer.
Walmsley, John, 666 School st., clerk.
Warnock, Francis A., 13 Wamesit st., plasterer.
Watson, Henry L., 84 Rolfe st., printer.

Watson, Peter, 84 Rolfe st., printer.
 Welch, Benjamin F., 160 Shaw st., foreman.
 Welch, Richard J., 543 Andover st., plumber.
 Welch, John F., 70 Livingston ave., plumber.
 Welch, Martin F., 64 Pleasant st., tanner.
 Welch, Frederick F., 30 Riverside st., cabinet maker.
 Wells, Arthur M., 11 Harding st., watchman.
 Westall, William E., 63 Dover st., merchant.
 Weston, Charles F., 32 Colonial ave., belt maker.
 Westwood, John S., 40 Smith st., druggist.
 White, Frank P., 940 Central st., tanner.
 White, James A., 154 A st., agent.
 White, John A., 70 Smith st., B. & M.
 White, John F., 75 Boynton st., clerk.
 White, William T., 86 Belmont ave., manufacturer of leather.
 Whiteley, Wright, 98 Andrews st., dealer.
 Whitney, Walter, 8 Livermore st., machinist.
 Whittier, Stephen T., 55 Fairmount st., paymaster.
 Wilde, Thomas E., 41 Forest st., manager.
 Wilder, William F., 20 Huntington st., plumber.
 Willman, Clarence T., 13 Oliver st., spinner.
 Wing, Charles H., 577 School st., merchant.
 Winn, John J., 29 So. Whipple st., mattress maker.
 Wood, James, 181 E. Merrimack st., barber.
 Woods, Joseph W., 76 Campaw st., conductor.
 Woodecock, William, 83 Howard st., second hand.
 Worsnip, Robert S., 850 Lakeview ave., spinner.
 Wyman, Alonzo H., 60 Fort Hill ave., machinist.
 Wyman, Stephen T., 185 Stackpole st., city library.

Y

Young, Charles F., 627 Central st., decorator.
 Young, William, 400 Lakeview ave., piper.

Z

Ziskind, David, 75 Gates st., dealer.

Election Commission.

HUGH C. McOSKER,
 JOSEPH H. MAGUIRE,
 THOMAS H. BRADEN,
 J. OMER ALLARD,

Clerk.

ANNUAL REPORT
OF THE
POLICE DEPARTMENT
OF THE
CITY OF LOWELL
MASSACHUSETTS



1920



ANNUAL REPORT

OFFICE OF THE SUPERINTENDENT OF POLICE,

Lowell, Mass., March 23, 1921.

HON. PERRY D. THOMPSON,

Mayor and Commissioner of Public Safety,

Lowell, Massachusetts.

DEAR SIR:

I most respectfully present to you a report of the work performed by the police department for the fiscal year ending December 31, 1920.

Respectfully yours,

REDMOND WELCH,

Superintendent of Police.

The organization of the police department for the year ending December 31, 1920, was as follows:

Superintendent, Deputy Superintendent, two Captains, one Inspector, six Lieutenants, seven Sergeants, two Police Women, one hundred twenty-eight Regular Officers, twenty-seven Reserve Officers, one Electrician, one Lineman, four Chauffeurs, one Matron, one Stenographer, one Operator, and one Charman. Population, estimated, 125,000. Area, 14.1 square miles. Accepted streets, 144.08 miles. Unaccepted streets, 73 miles. Appropriation for year, \$285,198.45.

Patrolman Arthur Drewett resigned March 11, 1920.

Chauffeur Carl Noyes was retired on pension September 15, 1920 and died January 9, 1921.

STATISTICAL REPORT
OF THE
Lowell Police Department
January 1, 1920, to December 31, 1920

RECORD OF ARRESTS, 1920

AGAINST PUBLIC ORDER

OFFENCE	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Abandoning Infant				2									2
Adultery		4	3	3	2	1	2	2					17
Auto Law, Violation	4	2		7	17	36	37	25	19	30	18	12	207
Bastardy	7	1	4	1	2	5	2	3	1		2	1	29
Capias	7	2	2	5	9	4	7	11	7	5	4	8	71
Carrying Weapons	1	2			5		2	1	2	4		1	20
City Ordinance, Violating					9	7	14	2	5	3	1		41
Cruelty to Animals	1		3	1	1		1						7
Common Brawler								1	1				1
Deserter from U. S. Army....	1	3	2	3		4	1	1	1	1	2	2	21
Delinquents	3	4		11	6	14	7	10	18	13	3		96
Disturbing the Peace					2	1	6	2	1	2	2		16
Dog Keeping, Unlicensed					4		1			1		1	7
Drunkenness	83	34	39	91	122	101	137	230	180	185	143	167	1512
Escaped from Prison	6	2			2			1	1	5	1	3	21
Failing to Keep Matches in Metal Box						1							1
Fornication		2	1	5	2	3	2	2					17
Forgery	1										2		3
Gambling					2				1	3	1		7
Hunting Law, vio. of										1			1
Idle and Disorderly								1	2				3
Impersonating an Officer								1					1
Incest				1									1
Indecent Exposure	2			1				1	3	2	1	1	11
Insane	1	2			1	1	1		2	2	1		9
Keeping Gaming Apparatus on Premises			2			3							5
Keeping House of Ill Fame....								1					1
Lewd Cohabitation	2	2	4	2	2	2	2	3	3	3		6	31
Labor Law, vio. of			1									5	6
Lewdness			3			1		1	4	3		4	16
Liquor Law, vio. of	2	6	5	8	9			17	12	14	20		93
Mann Act, vio. of								1					1
Maintaining Gaming Resort ..	1	1		1									3
Milk Law, vio. of				1									1
Neglected Children		1	4		6	11	1				3		26
Neglect of Family	10	8	12	9	2	8	16	11	18	19	10	13	136
Permitting Minor to Loiter in Bowling Alley			2										2
Polygamy									2	2			4
Possession of Counterfeit Money					1								1
Possession of Indecent Prints. Playing Game on Lord's Day.				1	4	4		3					11
Present at Game on Lord's Day	26		9	18	5			15	1	9	2	1	86
Present Where Gaming Imple- ments were Found	4	8	14		30			5	1	82	25		169
Practising Medicine, Unlicensed											2	1	3
Profanity						1	1			1		1	4
Promoting Lottery				1		2		1				2	6
Pure Food Law, vio. of	1							2		1	11	4	19
Riding a Freight, Unlawfully.			4										4
Safe Keeping	9	5	16	1	16	22	16	14	14	7	8	5	127
Sale of Cigarettes to Minors..		1											1
School Law, vio. of	1	1									1		3
Sodomy					1								1
Stubbornness	3	1	5	1	2	3	2	5	5	2	3	2	34
Sale of Stove Polish Contain- ing Naphtha						2							2
Conducting Business Under an Assumed Name								1					1
Suspicious Person	4	6	4	5	9	9	2	6	10	8	2	8	71
Travelling Without Sleigh Bells		9	1										10
Treason	1												1
Truants			1		3					2	1		8
Vagrants	1	1				2				1		2	8
Volstead Act, vio. of					11	11	5	12	7	2	2	7	57
	182	110	139	179	282	264	259	365	320	418	275	282	3075

AGAINST THE PERSON

OFFENCE	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Assault					8				1				9
Assault and Battery	4	9	6	13	5	11	19	18	25	19	12	17	158
Assault with Dangerous Weapon							1	1				2	4
Assault, Felonious	1		1		2		1	1			1		7
Assault on an Officer					6	2			2	3			13
Blackmail							3						3
Manslaughter	1		1	1	1	1			2	2			9
Rape			1				1						2
Robbery		1		1				1		4	2	1	10
Threats	1	1			1		2	3	2	1	1	1	13
	7	11	9	15	23	14	26	25	32	29	16	21	228

AGAINST THE PROPERTY

OFFENCE	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Attempt, Larceny						1					1	2	4
Attempt, Breaking and Entering								2					2
Breaking and Entering	8	5		5	3	11	9	13	6	4	6	8	78
Concealing Stolen Goods										1			1
Evading Car Fare			2								3	4	9
Larceny	11	10	18	16	15	13	22	11	16	32	23	24	211
Malicious Injury to Property	1						1		2	1			8
Receiving Stolen Goods		2		1		1		2	3	1	1	2	13
Removing Baggage Illegally								1					1
Riding Freight									1	3	1		5
Sale of Mortgaged Property						1					1		2
Suspicion of Larceny	1				1								2
Taking a Team										4			4
Trespass				6			1	5				1	13
	21	17	20	28	19	27	32	30	33	46	36	44	353

DISTRIBUTION OF OFFENCES ACCORDING TO NATIONALITY

	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
United States	82	82	101	131	191	175	169	205	217	259	172	167	1951
England	3	2	3	13	6	5	7	5	10	4	5	11	74
Ireland	40	5	9	27	36	24	33	66	33	40	32	47	392
Scotland	1	1	1	2	1	1	3	1	4	1	2	2	19
British Provinces	34	21	23	26	34	40	46	52	47	43	44	47	457
Greece	31	11	10	9	12	9	15	15	20	94	29	14	269
Russia	6	3	3	6	2	10	3	8	7	4	9	8	69
Turkish Empire	2	3	1	5	2	1	7	8	11	1	5	1	47
Poles	3	2	8	15	11	14	33	13	19	11	22	15	151
Lithuanians				1	1	6	3	23	3	1	1	4	42
Armenians			1		1		2	7	3	2	1	21	
Miscellaneous	8	8	8	3	24	23	15	4	13	24	15	23	164
Total	210	188	168	222	324	305	317	420	385	493	327	347	3656

DISTRIBUTION OF OFFENCES ACCORDING TO TRADES AND PROFESSIONS

	Jan.	Mar.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Building Trades	10	9	6	12	18	19	22	25	32	31	23	31	238
Mechanical Trades	21	7	7	10	23	22	26	33	35	34	34	25	277
Mill and Factory	51	24	39	45	60	53	66	95	85	133	56	74	781
Shops and Stores	25	23	19	29	43	40	37	37	55	55	56	44	463
Professional	1				2	6	4	3	2	4	2	2	24
Agricultural		1	2	3	7	4	10	8	5	7	7	3	57
Clothing and Garb	2							1		1			4
Agents, etc.	4	1	2	2	6	7	6	2	4	4		9	47
Laborers	51	48	45	62	85	65	82	147	91	127	84	94	981
Service, Domestic	10	6	10	12	9	12	15	14	25	16	11	20	160
Transportation	13	5	10	21	29	27	23	25	19	37	16	20	245
Children	14	11	10	15	19	31	13	12	17	29	26	11	208
Soldiers	8	1	10	5	21	7	4	2	5	9	7		79
Sailors		1	4	3		6	3	2	2	3	1	13	38
Miscellaneous		1			4	10	4	13	7	5	2	1	50
None				4									4
Total	210	138	168	222	324	305	317	420	385	493	327	347	3656

DIVISIONAL REPORT
OF THE
Lowell Police Department
January 1, 1920, to December 31, 1920

MONTHLY REPORT OF PATROLMEN, 1920

	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Persons Assisted Home Drunk.	4	4		5	2	6	4	10	6	11	7	14	73
Persons Arrested	80	51	54	78	82	84	128	193	153	178	113	165	1359
Buildings Found Open and Secured	108	96	84	108	96	66	77	80	80	72	94	65	1026
Defective Streets and Sidewalks	1	2	28	12	7	9	14	10	15	11	7	7	123
Fire Alarm Given		2	1	1	1	2						3	11
Lost Children Restored	1	5	4	8	2	6	7	7	1	4	4	6	55
Value of Stolen Property Recovered	\$49.50	\$16.35		\$32.40	\$48.84		\$29.00	\$20.00	\$405.00	\$379.44	\$290.70	\$241.50	\$1512.53
Gas Lights Not Burning	685	629	457	142	7	61	56	68	187	84	72	120	2568
Electric Lights Not Burning ..	445	464	333	231	145	242	279	251	256	191	151	265	3253
Teams Put Up and Cared For ..	2	3		1	4		5				3		18
Obstructions Not Lighted	1	3	5	4		2	3	7	3	6	1	1	36
Obstructions Removed	2	5	8	3			5		4	2	4		36
Disturbance Quelled	24	19	6	15	19	13	16	24	34	29	15	22	236
Sudden Death		1		1		2			1	1		1	7
Violated Liquor Law	2	1		1					1	2	3	1	11

MONTHLY REPORT OF LOCKUP, 1920

	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Money Taken From and Returned to Prisoners	\$1165.98	\$456.91	\$1180.08	\$2027.36	\$1576.57	\$1595.23	\$1548.02	\$3584.53	\$2468.05	\$2767.13	\$2081.61	\$3414.18	\$23865.65
Defective Streets and Sidewalks				18	13	9	13	12	7	10	10	7	99
Obstruction Removed from Streets	1	1			2	2			1	1			8
Stores Found Unlocked	106	90	81	111	116	79	88	66	82	93	99	75	1086
Lost Children Returned to Parents		1		1		2		1	1			1	7
Stray Teams Found and Put Up	1	1		1		2	1	1			2		9

MONTHLY REPORT OF POLICE MATRON OF ARRESTS OF WOMEN, 1920

Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Abandoning Child												2
Adultery	2	1	2	1		1	1	2		1	2	7
Assault and Battery	1		1			1			1			8
Breaking and Entering												1
Capias	2	4	9	8	6	8	14	1	7	7	4	1
Drunkness	1					1						8
Disturbing the Peace												1
Escaped Prisoner	1		3	1			1				1	1
Fornication	1				2							8
Insane	1		1		1							2
Larceny	1		1		4	3		2	4	4	6	25
Lewd Cohabitation	1	2	1			1		1			3	11
National Prohibition Law, vio.	1		1		1				3			1
Lewdness							1	3	1		3	12
Polygamy		1			1			1	1			2
Profane Language	1	6			2	3	2	5	2	1		1
Safe Keeping	1	1		1	1		2	5	2	3	1	23
Stubbornness												1
Total	7	15	18	11	18	18	23	34	21	16	20	210
Minors												
Money Taken and Returned	1	4	1	2	2	3	7	10	4	8	8	51
to Prisoners	\$19.65	\$252.24	\$78.25	\$3.16	\$25.13	\$21.64	\$14.53	\$34.99	\$31.08	\$53.42	\$53.42	\$587.51

REPORT OF CRIMINAL BUREAU OF INVESTIGATION FOR 1920

MONTHS	Arrests	Lost and Stolen	Recovered	Still Missing	Autos Stolen	Recovered
January	27	\$ 780	\$ 690	\$ 90		
February	30	672	520	152		
March	31	824	710	114		
April	29	724	610	114	1	1
May	26	520	480	40		
June	22	630	500	130	1	
July	19	755	705	50		
August	26	540	410	130	1	1
September	27	720	650	70	3	1
October	34	570	480	90	3	
November	29	720	550	170	6	2
December	33	810	740	70	3	2
Total	323	\$8,265	\$7,045	\$1,220	18	7

RECOVERED FOR OTHER CITIES

Woonsocket, R. I.	\$ 80.00	Fitchburg, Mass.	162.00
Manchester, N. H.	80.00	Nashua, N. H.	25.00
Boston, Mass.	500.00	Camp Devens	500.00
Malden, Mass.	2,700.00	Burlington, Vt.	400.00
Lynn, Mass.	1,200.00		
Amesbury, Mass.	300.00	Total	\$8,047.00

PRISONERS ARRESTED FOR OTHER CITIES AND TOWNS

Lawrence, Mass.	1	Worcester, Mass.	2
Boston, Mass.	4	Winchendon, Mass.	1
Palmer, Mass.	1	Fall River, Mass.	1
Everett, Mass.	2	Northampton, Mass.	1
Lynn, Mass.	2	Fitchburg, Mass.	1
Haverhill, Mass.	2	Woburn, Mass.	1
Reading, Mass.	1	Woonsocket, R. I.	1
Amesbury, Mass.	2	Augusta, Me.	1
Cambridge, Mass.	2	Windsor, Vt.	1
Taunton, Mass.	1	Burlington, Vt.	1
Somerville, Mass.	1	Baltimore, Md.	1
Pittsfield, Mass.	1	Federal Government	2
Marlboro, Mass.	1		

Respectfully submitted,

JAMES BROSNAN,

Capt. of Police, Lowell, Mass.

POLICE SIGNAL SYSTEM, 1920

MONTHS	Duty Calls	Telephone	Wagon	Prisoners	Miles
January	39,586	3,728	93	128	111
February	36,205	3,362	52	59	71
March	39,105	3,485	66	94	92
April	38,040	3,428	97	131	112
May	36,897	3,650	130	178	156
June	36,055	3,600	108	131	127
July	37,712	3,543	135	157	163
August	36,784	3,482	199	248	249
September	36,209	3,391	171	198	205
October	36,439	3,516	193	298	241
November	36,496	3,447	129	173	162
December	38,353	3,738	164	200	203
Totals	447,881	42,370	1,537	1,995	1,892





